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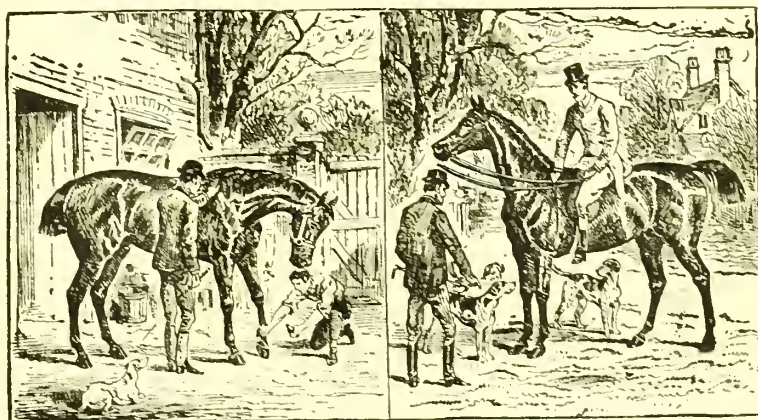
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SAVARS Perfume Sachets " 79.
SAVARS Perfumery " 65.
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SAVARS Popular Inhaler See page 40.
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SAVARS Violet Powder (guaranteed pure Starch
 Powder) See page 109

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SAVARESSE'S Membraneous Capsules. See
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SAVARS Poor Man's Plasters, Ordinary, Savars.
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 We call special attention to these Plasters.
 They are the same size as ordinary Poor Man's
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 equal to Leather, and Porous. They already
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SAVARS Porous Marginal Plasters, Savars,
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SAVARS Pumice Stone " 78.
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Important to Chemists & others.

On Wednesday, October 17, 1888, at Cardiff, before Mr. J. L. Goodrich, Deputy Stipendiary, and Dr. J. H. Paine, J.P., Mr. J. T. Walklate, Chemist, Cardiff, was summoned by the Excise authorities for selling, without a licence,

"PEARSON'S LIEBIG BEEF WINE."

The Excise were represented by Mr. Blaycock, and Mr. J. David appeared for Mr. Walklate.

The case was opened by Mr. Blaycock stating that this case was brought before their worships at the instance of the Board of Trade. After a few opening remarks, wherein he stated that the article in question, viz., the Beef Wine, was insufficiently medicated, and consequently had rendered the vendor liable for selling without a licence, in support of this statement he called Mr. H. L. Helin, Analyst, Somerset House, who stated that he had analysed the Beef Wine now before their worships, and purchased of Mr. Walklate, and found to contain 32 per cent. of proof spirit and one grain of quinine to the ounce.

Cross-examined by Mr. David: Did you discover any essence of beef?—Yes.

How much?—8 per cent.

Nothing more?—No.

Mr. David: Have you heard of Sir Charles Cameron?—Yes.

Would you accept him as an authority?—Yes.

Mr. David (handing up Sir Charles Cameron's analysis): Will you read that?

After reading, do you admit that to be a correct analysis?—Yes.

Do you agree with that statement?—Yes.

Sir Charles Cameron states here that 1 quart of Pearson's Liebig's Beef Wine contains the

expressed juice of 5 lbs. of Beef. Do you agree with that?—Yes.

Mr. David, addressing the Bench: I submit there is no case. The wine is a properly medicated article, and consequently free, or exempt from duty.

The Deputy Stipendiary: Such was my opinion last week, Mr. David, when the last case was before me, and I am of the same opinion still. I consider Pearson's Liebig's Beef Wine to be a medicated wine, consequently exempt from duty.

People do not put these articles into wine for table use, but for medicinal purposes; in which opinion Dr. Pain concurred.

VERDICT—Summons dismissed with costs.

Highest Awards, Liverpool, Glasgow, and Newcastle.

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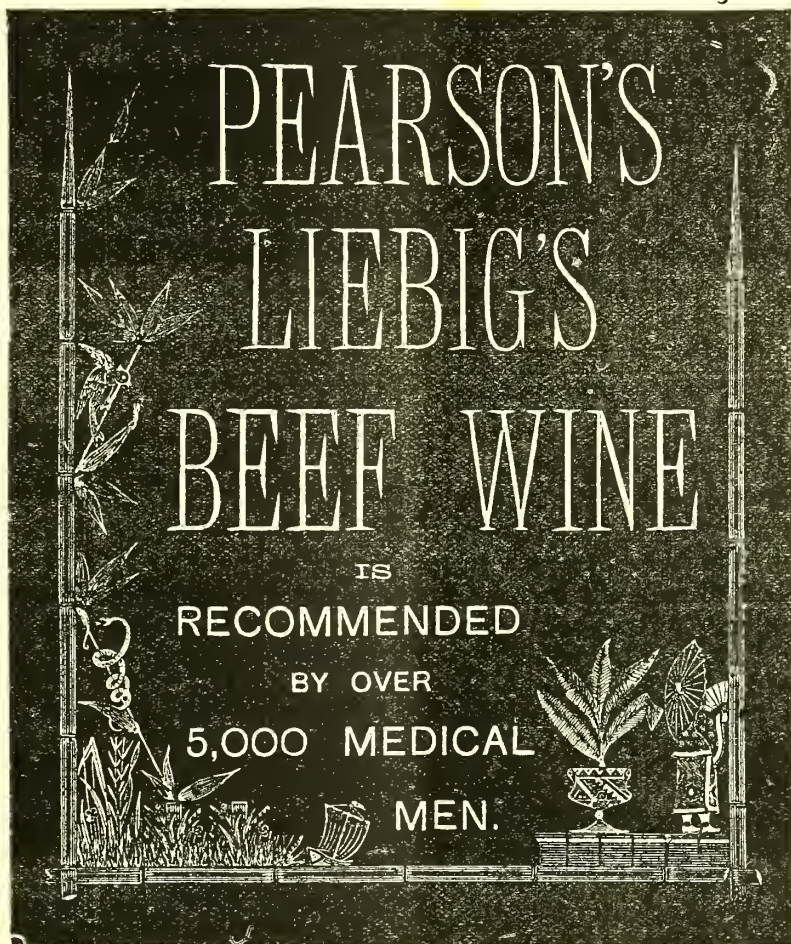
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BEEF WINE

chemically tested,
and proved to con-
tain a large per-
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Juice.

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As the Best Preparation for Giving Nourishment and Strength.

 The Juice of 5 lbs. of the Best Beef is dissolved in each quart of the above.

NONE GENUINE UNLESS SIGNED "D. PEARSON"

COPY OF ANALYSIS BY

SIR CHARLES A. CAMERON,

Ex-President and Professor of Hygiene Chemistry, Royal College of Surgeons, Ireland; President of the Public Health Medical Society; Vice-President of the Institute of Chemistry of Great Britain; and Chief Medical Officer of Health, Dublin.

I have carefully examined a specimen of "Pearson's Liebig's Beef Wine," purchased by myself in a retail shop in Dublin. It consists of Wine, Malt Extract, and Beef Juice, and the study of its composition leads me to believe that the expressed juice of five pounds of Beef is really contained in a quart of this Beef Wine. The ash is rich in soluble phosphates. Altogether it is a very valuable food. It is, unlike most preparations of the kind, rich in soluble albumen, and, in short, all its ingredients are in the most effective state for digestion and assimilation, and I can strongly recommend it.

(Signed) CHARLES A. CAMERON.

COPY OF UNSOLICITED TESTIMONIAL RECEIVED BY LIEBIG'S WINE CO. FROM

H. J. HARDWICKE, M.D., F.R.C.S.,

Physician to Sheffield Public Hospital for Skin Diseases and Scrofula, and to Sheffield Ear and Throat Hospital.

GENTLEMEN,—I have submitted your "Pearson's Liebig's Beef Wine" to careful analysis, and have pleasure in stating that it is a genuine preparation, containing in absolute solution the Essence of five pounds of Beef to each quart. As a tonic, in all cases of debility and wasting illness, it is invaluable. I shall recommend it largely to my patients.

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Yours very truly,

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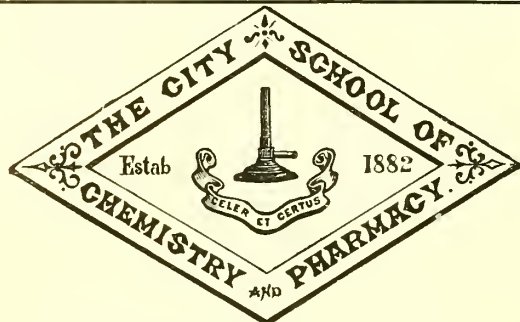
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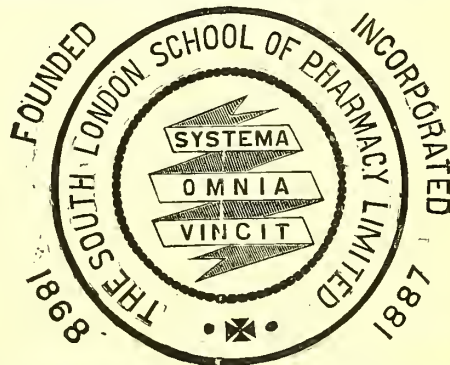
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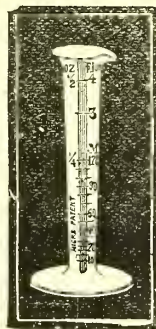
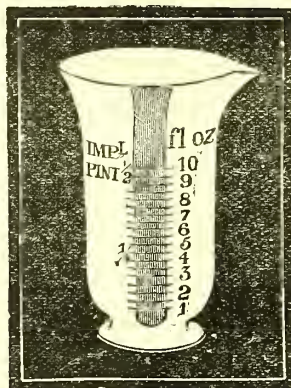
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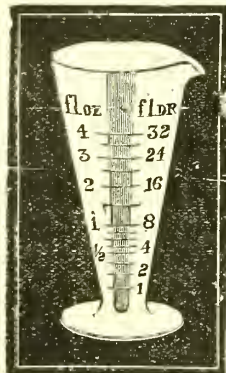
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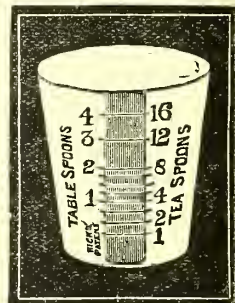
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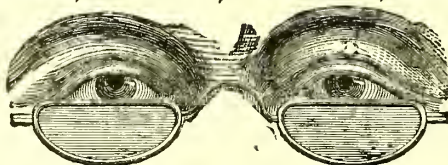
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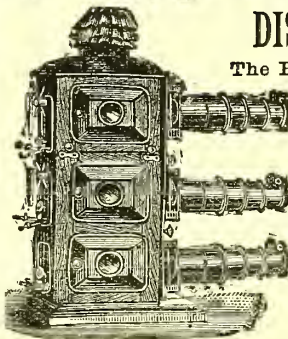
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Reliable recipes, 6d. each; full set of 130 neatly copied in book, 7s. 6d.; price 20s., or offer. "Chemist," Edwards, Wye, Kent.
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Literature.

A lot of useful books for anyone reading for Minor on sale; list on application. Jones, Chemist, Widnes.

Laurie's "Homœopathic Domestic Medicines," twenty-seventh edition, latest; cost 16s.; price 10s. 6d., delivered. Richard Cockcroft, Dentist, Hebden Bridge, Manchester.

Shop Fittings.

30 drawers, 6 ft. run, 50s.; counter, mahogany front and top, 7 ft. 6 in. by 2 ft., 65s.; bent-glass counter-cases, 36 in. by 17 in., 21s. each; mahogany plate glass wall-case, piano shape, 4 ft. 9 in., 12s.; bent plate-glass tooth brush case, 22 in. by 18 in., 32s.; 2-lb. brass scales, 18s.; bronzed stands with three adjustable shelves, 18s. and 25s.; outside lamps, shop rounds, specie jars, carboys, 5 and 1 grain pill machines, 12s. 6d. Natali & Co., 184 Aldersgate Street, E.C. (nearly opposite Maw's).

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Mirror in frame, 18 in. by 32 in., 37s.; 12 dozen blue ointment jars, sizes from 4 oz. to 4 lb.; 50 dozen shop rounds, all sizes; 18 ft. mahogany-top counter, 47 15s.; 5 ft. bent plate glass ease, as Maw's A 18, 47 10s.; 3 ft. bent case, with sloping shelf, 35s.; 2 ft. 6 in. bent ease, 18s.; pair specie jars, royal arms, gilt glass covers, 37 10s.; pair 6 ft. bent plate-glass counter case, as Maw's A 18, 57 5s.; 8 ft. 6 in. plate-glass and mahogany ebonised fronted counter with mahogany top, fitted inside with movable shelves, 67 10s.; mahogany-top counters, pine, panelled fronts, stained and polished as mahogany, 5s. 6d. per foot; 4-ft. nest (13) drawers for under counter, for labels, paper, till, &c., 40s.; desk and plate-glass case as Maw's fig. A 31, 60s.; soda-water stand, 25s. Note the address—Natali Bros., 45 Old Street, Goswell Road, London, E.C.

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"Progress of Pharmacy," 2s.; Cooper's "Anatomy Copier Plates," vols. 1-4, 10s.; Bell's "Surgery," vol. 1, 5s.; "Pharmaceutical Journal, Chemist and Druggist," 1887-8, 15s.; 3-pint gazogene, wicker hound, marble bottom, 7s. 6d., bargains. "Medicus," 43, Tontine Street, Ilkestone.

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"Journal of the Chemical Society," November, 1882. Gould & Son, 59 Moorgate Street, E.C.

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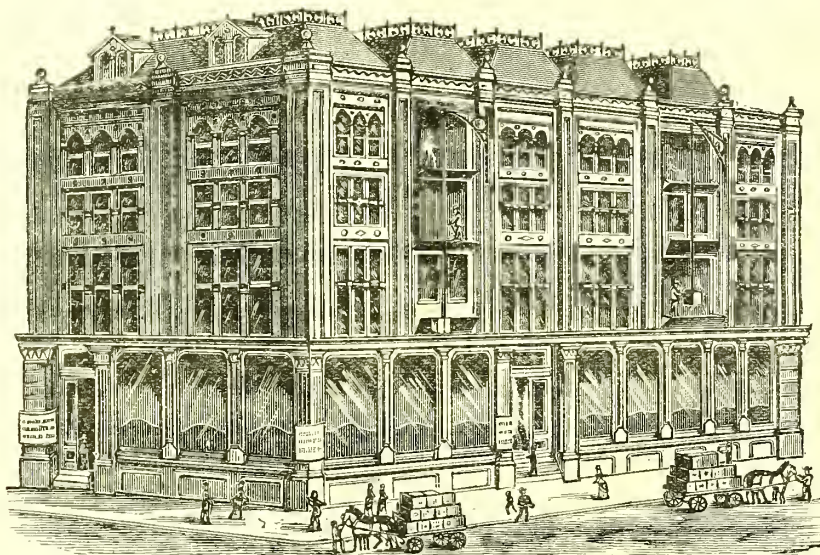
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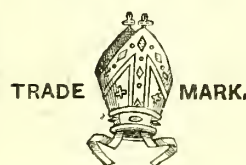
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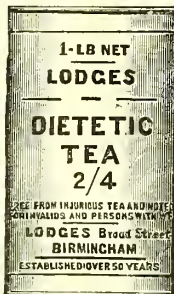
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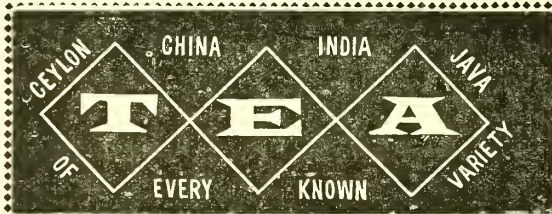
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REPORT

ON

COLEMAN'S LIEBIG'S EXTRACT

OF

MEAT AND MALT WINE,

By FRANCIS SUTTON, Esq., F.C.S.

Public Analyst for the County of Norfolk, &c.

FRANCIS SUTTON, ESQ., F.C.S.,

Analytical and Consulting Chemist,
Author of Handbook of Volumetric Analysis,
Chemist to the Norfolk Chamber of Agriculture,
Gas Examiner for the City of Norwich.

NORFOLK COUNTY ANALYSTS

OFFICE,

LONDON STREET, NORWICH,

July 25th, 1888.

I hereby certify that I have made an exhaustive analysis of the Meat and Malt Wine prepared by Messrs. Coleman & Co., Limited, Norwich, with a view to determine chiefly whether it really contains an appreciable quantity of Meat Extract, and whether it is entitled to be classed as a suitable dietetic stimulant for invalids. The result of my analysis proves that it does contain a suitable proportion of all the most valuable principles contained in Liebig's Extract of Meat. It is well known to physiologists that this extract is not valued for the ordinary albumenoids (such as gelatine and albumen), which are, indeed, excluded to a large extent by the process of manufacture, but that its chief value, as shown by Baron Liebig himself, consists in its containing those essential principles peculiar to flesh, and which have a remarkable restorative power over the nervous system of invalids, thus rendering Liebig's Extract famous. In addition to these valuable substances the wine also contains a considerable quantity of Malt Extract, which is also well known and appreciated as an excellent restorative in cases of debility.

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As witness my hand,

(Signed)

FRANCIS SUTTON,

Public Analyst for the County of Norfolk, &c.

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Hornby, A.
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Lynch and Co.
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Clarke, W.
Ellis, N. Sons and Co.

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Liebig Co.
Maclean and Son
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Ridgely, Dr., Food
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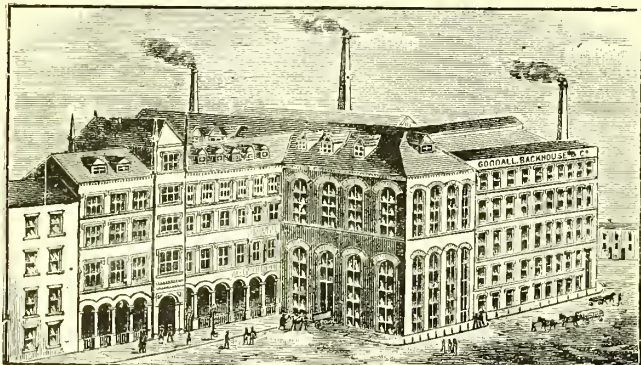
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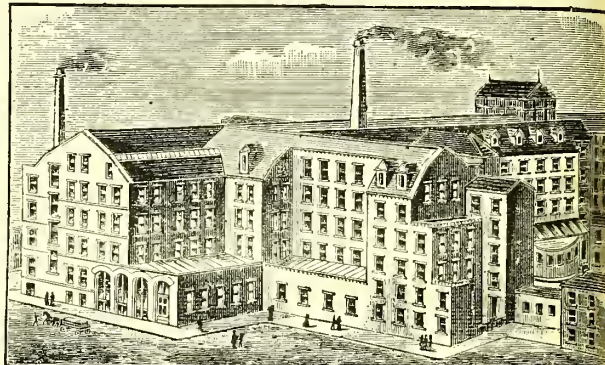
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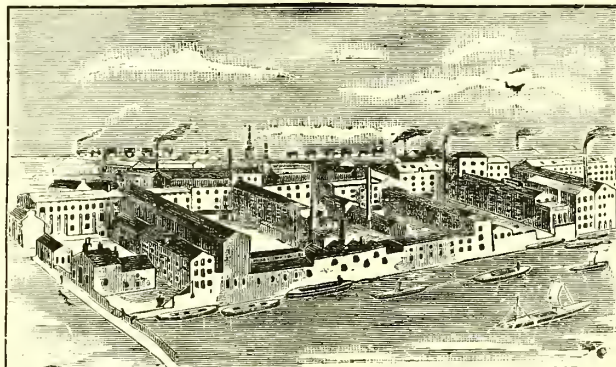
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PREPARED BY THE SWISS MILK CO., ST. GALL, SWITZERLAND

UNSWEETENED OR SWEETENED.

The cheapest, purest, and most nutritious of all similar productions.

The Lancet says:—A very interesting and valuable preparation.*British Medical* says:—The preparation represents the highest possible degree of concentration which can be obtained, and is sure to be appreciated.*The Medical Press* says:—A milk which is with difficulty distinguished from fresh cow's milk.

CARL LAWINSKI, 50 Mark Lane, LONDON, E.C.

**VALUABLE & INTERESTING TO EVERYBODY.
COMPRESSED HOPS.**

Best Hops compressed into small parcels of one pound and half-pounds, and sent out in cases containing 30 lbs. each. These Hops are specially selected and compressed for keeping purposes, and will retain their aromatic strength for a considerable time.

They are introduced to the Public to enable them to make their own BITTERS, YEAST, HOME BREWING and numerous other purposes. Full particulars given on each packet.

*P.S.—Chemists will naturally see the great advantage in making their own Bitters from the Pure Hop itself.*Specially Packed by **A. WILKINSON & SONS, 27 Derby Lane, Old Swan, LIVERPOOL.**

SAMPLES AND QUOTATIONS ON APPLICATION.

Sole Agents for Chemists—**EVANS, SONS & CO., Liverpool; EVANS, LESCHER & WEBB, London; EVANS, SONS & MASON, Lim., Montreal.****MELLIN'S FOOD**

FOR

**INFANTS AND INVALIDS.****NOT FARINACEOUS.****MELLIN'S FOOD
MELLIN'S FOOD
MELLIN'S FOOD
MELLIN'S FOOD**

Is the only Infants' Food correctly prepared in accordance with the well-known laws of Physiology as regards Digestion and Nutrition.

Is not farinaceous, the insoluble starchy components which cannot pass into the blood-stream having been changed into soluble bodies, which are ready to supply, immediately, material for nutrition and growth.

Requires to be dissolved in warm milk and water only, and is then ready for use, no cooking and straining being necessary.

Has saved thousands of infant lives, many cases apparently hopeless, and is prescribed by the majority of medical men.

The immense advantage derived from the use of

MELLIN'S FOOD

Is supported by unsolicited testimonials from all great medical authorities, and from immense numbers received from the public.

G. MELLIN, MARLBOROUGH WORKS, PECKHAM, LONDON, S.E.

Successful Pharmacy.

[LONDON]

NOVEMBER 3RD.

[1888.]

The Tide of Progress.

THE PAST YEAR has, with us, been one of remarkable progress and success. For their hearty support and assistance we have to thank those intelligent members of the medical and pharmaceutical professions who have recognised the merits of our products and the benefits of our improvements.

Those croakers who see no good in progression we leave to the tender mercies of the editor of THE CHEMIST AND DRUGGIST, who recently made the following crisp comment:—

“Among the exponents of modern pharmacy no firm in this or any other country has acquired a more world-wide reputation than the one which, under the style of Burroughs, Wellcome & Co., has become familiar to every reader of these pages within the last ten years. We have a number of old-fashioned friends (who will, we hope, be ever with us) to whom the new-fangled notions of this corner of the nineteenth century are an abomination and a terror, and to whom these pharmaceutical strivings after novelty and perfection in the manipulation of the raw material of the medical armoury have an odour of anything but scientific sanctity. To them the introduction of a new medicine or a new form of an old medicine is a solemn event which should only be undertaken with due regard to all medical and pharmaceutical proprieties, as they understand them. Progress by means of research laboratories or properly-incorporated societies, and after methodical discussion by recognised authorities, is in their view the only genuine article, and the intervention of commercial enterprise, or of Frenchmen, Germans, or Americans, seems to them to be an uncalled-for interference with the natural order of things.

“But these gentlemen speak too late. Enterprise in pharmacy is the order of the day. The new generation of medical practitioners are eager for all the aid that skilled pharmacy can give them, and London is the market in which the *best men win*, regardless of nationality. Messrs. Burroughs, Wellcome & Co., since their establishment here, have set themselves not only to meet, but rather to anticipate, the demands of the medical profession, and it is fair to say that in carrying out their plans they have acted with the utmost loyalty to their pharmaceutical colleagues. They have found it possible to create an entirely new class of business in what seemed to be a sufficiently crowded trade, and they have brought this about by methods and manners sufficiently novel to be worthy of record in these pages.”—THE CHEMIST AND DRUGGIST, January 28, 1888.

To our unsuccessful imitators, chagrined and discomfited by their failure to find acceptance of their inferior products as substitutes for the original and true, we owe no thanks; however, we are not sad because we are so much pursued by these would-be imitators, for, by following in our wake like a pack of hungry wolves, ravenous for our substance, they only emphasise the importance of our products, and bring into vivid contrast their own failure with our success.

The paragraph from THE CHEMIST AND DRUGGIST headed “*Stealing the Handcuffs*,” which we quote elsewhere, shows to what depths these parasites of the trade will descend.

Geo. R. Sims (“Dagonet”) recently said:—

“The work of a man's brain is, or ought to be, as worthy of respect as his pocket-handkerchief. If a man takes my pocket-handkerchief and picks my name out of it, he is called something which is not nice. But if I called the man who takes my work and picks my name out of it the same something, I should be told I was unduly severe.”

This applies with even greater force to those who, in pirating our products, become “the same something,” for they not only take what is ours, but they also wrong the consumer by substituting inferior products, which fail to serve the purpose. Some of these imitators, while pretending to be anxious to raise the standard of pharmacy, are, in reality, far more concerned and distressed because certain manufacturing chemists have carried the standard beyond and above their ken, and are now reaping the well-deserved fruits of legitimate enterprise—in spite of the covetous imitators' cowardly attacks and piracies.

Our own success through originality, and the failure of “our friends the enemy” through their cupidity, barrenness, and indolence, is satisfactory to us. We have every evidence that we lack not the support of the good and true of the profession and trade, for they appreciate and pay just tribute to those who think and act for themselves, originate and improve, and contribute to the progress of medicine and pharmacy, while they hold in distrust and contempt those who attempt to impose upon them by substituting counterfeits.

The development of our business has been so rapid that, in spite of the enlargement of our old laboratories, they no longer afford us sufficient room and facilities for our manufactures; therefore, we have acquired the extensive Phoenix Mills, at Dartford, Kent, and are converting them into “The Snow Hill Laboratories,” which we are fitting with the latest improved forms of machinery, chemical and pharmaceutical apparatus, and appliances, and it is our intention to make them the most complete manufacturing laboratories in Europe.

Both members of our firm are practical pharmacists and graduates of the oldest pharmaceutical college in the world, and we appreciate the absolute necessity of employing an efficient staff. Our laboratories are under the management of a distinguished practical and scientific chemist, who has long held a professorship in one of the leading institutions of this country, and he is assisted by a corps of thoroughly qualified pharmacists.

We do not fail to recognise that we owe much of our success to the zealous and loyal devotion of our employés to our interests; and this we endeavour to reciprocate by a due regard for their welfare.

Successful practitioners now appreciate the well-established fact that in the scientific practice of medicine absolute accuracy of dosage is of the greatest importance, and that the influence of the mind over the body is such that whims and fastidiousness of patients in respect to nauseous and offensive medicines cannot consistently be ignored. It is well known that patients often deceive their doctor by secretly destroying or throwing away medicines that offend the taste

Syphons & Apparatus with all the latest improvements for the Manufacture of Aërated Waters

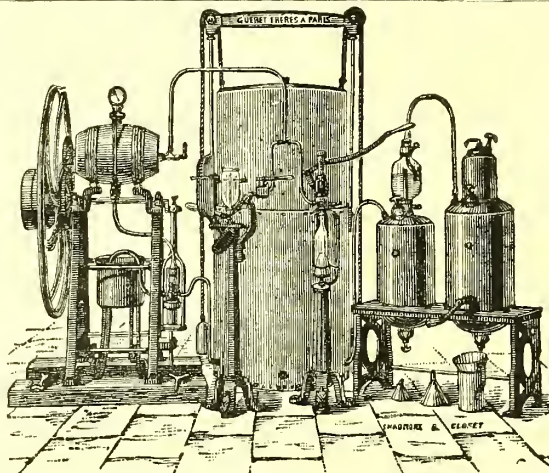
GUÉRET FRÈRES,

MACHINISTS AND PATENTEES IN FRANCE AND ABROAD
PARIS—72 BOULEVARD DE LA GARE, 72—PARIS.

GOLD MEDAL,
AMSTERDAM, 1883.

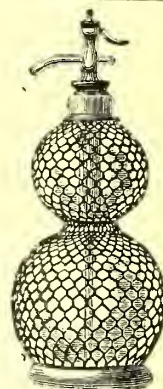


SYPHONS WITH SHORT LEVER,
With metal tops of pure tin, carefully mounted, and the glass of the first quality.



"CONTINUOUS PROCESS" Apparatus, complete, with BRONZE SATURATOR (spherical or barrel-shaped). Guaranteed without flaw in construction, possessing perfect action, and tested to a high pressure, while fulfilling every desirable condition of economy and sanitation.

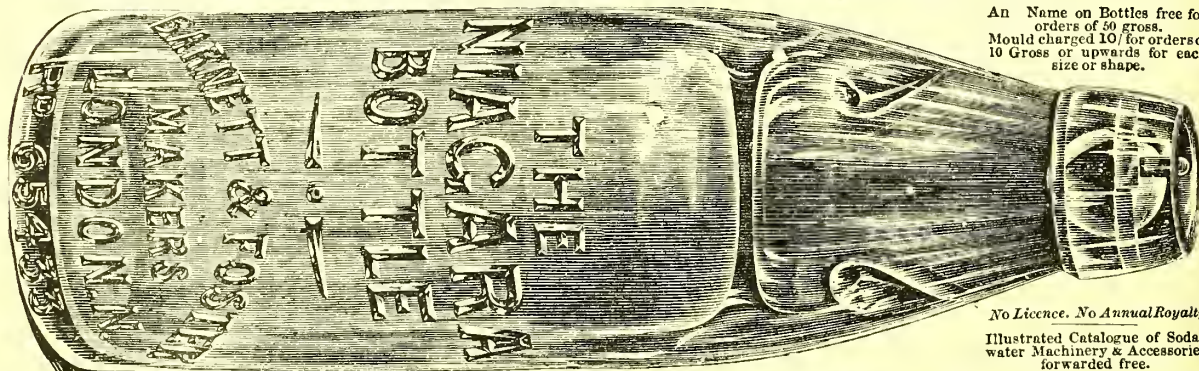
DIPLOMA OF HONOUR
PARIS, 1887



GAZOSELTZ,
For the instantaneous production of Aërated Beverages at table. Any one can use them.

FULL PARTICULARS AND GENERAL CATALOGUE SENT ON APPLICATION.

THE "NIAGARA" GLOBE-STOPPERED BOTTLE.



An Name on Bottles free for orders of 50 gross. Mould charged 10/ for orders of 10 Gross or upwards for each size or shape.

No Licence. No Annual Royalty. Illustrated Catalogue of Soda-water Machinery & Accessories forwarded free.

Present Prices, net :—SPLITS, 14/, FULL SIZE, 16/ per Gross, including Rings. 12 and 14 oz., 1/; 16 oz., 2/ extra per Gross. At our Works, LEEDS, YORKSHIRE.

EXTRA RINGS, 1/8, 1/9, and 2/ per Gross. SEND FOR SAMPLE AND COMPARE!

ORDERS TO BE SENT TO

BARNETT & FOSTER,

Mineral Water Engineers, Manufacturing Chemists, and General Providers to the Aërated Water, Wine, Beer, and Cider Trades.

"NIAGARA WORKS," 26th EAGLE WHARF ROAD, LONDON, N.

ROBERT GIBSON & SONS,

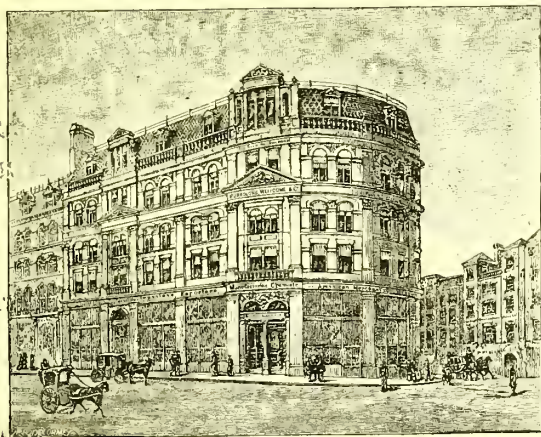
MANUFACTURERS OF HIGH-CLASS LOZENGES OF EVERY DESCRIPTION,
JUJUBES, BOILED SUGARS, COMPRESSED PELLETS, &c., &c.

Shipped through London Houses to all parts of the World. Price Lists sent on application to the Works,

ERSKINE STREET, HULME, MANCHESTER, ENGLAND.
LONDON DEPOT—1 AUSTRALIAN AVENUE.

Successful Pharmacy—continued.

or are repulsive in appearance, and this even in cases where the successful action or the failure of the remedy is perhaps a matter of life or death; as a natural result, if the patient dies or derives no benefit, the doctor or the drug, or both, bear the blame.



SNOW HILL BUILDINGS.

BURROUGHS, WELLCOME & CO.'s Offices and Warehouses, occupying Seven Floors in all.

The following notes include several of the more important discoveries and improvements of the year:—

Sulphonal, the new hypnotic, produces sweet sleep and no harmful effects.

Salol, the new anti-rheumatic.

Antipyrin, the new anti-pyretic, which has already gained an established place in therapeutics.

Our improved Lanoline products.

Vaporoles, for inhalation and fumigation.

Tabloids of triturated drugs, embracing tinctures, alkaloids, etc.

The tabloids of compressed drugs, in accurately divided doses, greatly lessen the risk of error by nurses and patients, and afford an unchangeable and acceptable form for administration; and at the same time these medicines are so compact and portable that patients travelling or attending to business, professional, or official duties, can easily carry the remedies prescribed in the waistcoat pocket.

The Valoids of assayed drugs represent one grain of the standard drug in each minim. This is the most concentrated liquid form in which *simple entire drugs of definite strength* can be prescribed. Physicians and chemists regard the Valoids as a convenient and reliable means of preparing officinal and unofficinal tinctures, syrups, infusions, lotions, &c., at a moment's notice by proper dilution. Thus the use of Valoids obviates the necessity of carrying bulky stocks of tinctures, &c., and insures uniformity of strength.

Elixoids of various nauseous drugs, such as Iodide of Potassium, Valerianate of Ammonia, &c., are so palatable that patients regard the remedy prescribed in this form more as a nectar than as a medicine.

Having made important improvements in our machinery and apparatus, and having greatly increased our manufacturing facilities, we are now enabled to offer very great reductions in the prices of several of our articles, including our TABLOIDS and TABLETS of Compressed Drugs. The advantages of these compressed goods—ease of administration, accuracy of dose, as well as the absolute purity of the drugs—are well known.

Particular attention is invited to our new style vinaigrette oval bottles of Tabloids and Tablets in tasteful glass-fronted cartoons—making a beautiful display for the chemist's show-case and window.

The prices of *Tabloids of Soluble Quinine* are now so slightly in advance of the cost of the crude drug as to render this form profitable for dispensing in place of ordinary pills or powders, and these tabloids dissolve much more quickly.

The reduced prices now place perfected goods within the reach of even the poorest classes, so that there will no longer be any excuse for substituting impure and otherwise imperfect preparations for our *original and genuine* products. Every chemist who cares for his own good name will prefer to dispense *the best*.

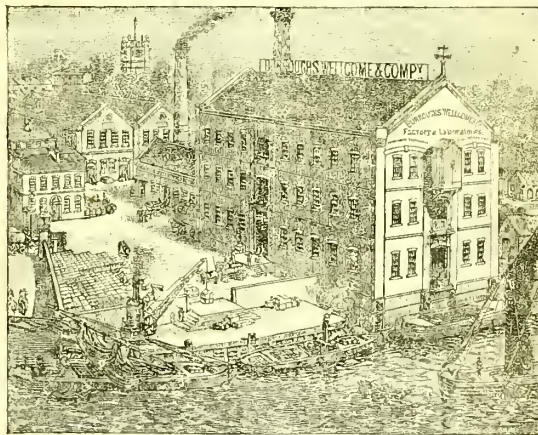
We shall continue in our endeavours to excel in all our products, and as nearly as possible to attain perfection in their manufacture. We shall not be content simply to keep pace with other manufacturers in this era of progress, but shall, as in the past, strive with all zeal to keep the lead in perfecting improvements in pharmacy.

Our claim for favour and preference is based solely on the sterling merits and absolute superiority of our products.

We hold ourselves ready in the future, as in the past, to receive back any articles manufactured by us, if in unbroken packages, if they are found slow of sale, and give choice of any of our other goods in exchange in London.

Although this privilege of exchange has been freely offered by us from the commencement of our business, very few of our goods have been returned, proving that the articles we have introduced meet with a ready sale.

Our prices afford a very good profit to the trade. We shall at all times endeavour to protect chemists in their legitimate profits, and trust to their spirit of fair play to protect us by discouraging the sale of the various cheap imitations of our articles.



BURROUGHS, WELLCOME & CO.'s Factory and Laboratories, occupying Six Buildings and River Wharf.

We offer our best thanks to the trade for their ready appreciation of our various chemical and pharmaceutical improvements, and shall be glad to co-operate with them at all times for the purpose of increasing their sales upon our goods. Printed matter, show-cards, &c., supplied on request.

The wholesale trade generally supply our goods on most favourable terms.

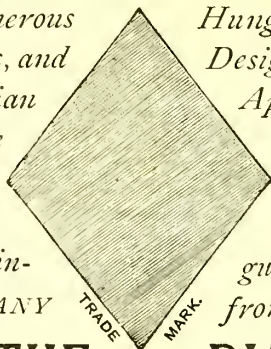
With greetings,

We remain, very respectfully,

BURROUGHS, WELLCOME & CO.

THE BEST NATURAL APERIENT.

The APOLLINARIS COMPANY, LIMITED, London, beg to announce that, as numerous to the public with Marks, Names, and which are used for the Hungarian long imported by them, they have of their own, comprising their selection, which consists of a will henceforth serve to distinguish the HUNGARIAN APERIENT WATER SOLD BY THE COMPANY



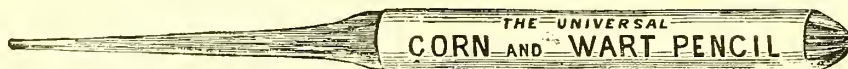
Hungarian Aperi-ent Waters are offered Designations very similar to those Aperi-ent Water (Hunyadi Janos) so now adopted an additional Label Registered Trade Mark of RED DIAMOND. This Label distinguishes the HUNGARIAN APERIENT from all other Aperi-ent Waters.

DEMAND THE DIAMOND MARK,

and insist upon receiving the HUNGARIAN APERIENT WATER of the APOLLINARIS COMPANY, LIMITED, London.

Of all Druggists and Mineral Water Dealers.

CORNS.



WARTS.

ROBINSON'S.

THE OLDEST AND MOST SUCCESSFUL.
1 doz. mounted on a handsome Illustrated Show Card, Retail, 6d. each; Wholesale, 3s. 6d. per doz. It is especially adapted for Export Trade, and may be safely sent to the hottest climates, as each glass tube is hermetically sealed and enclosed in a cardboard case, with full directions for use. N.B.—The above is exempt from Stamp Duty by permission of the Board of Inland Revenue. Wholesale by all the Patent Medicine Houses, or from

B. ROBINSON, Manufacturing Chemist and Distiller, PENDLETON, MANCHESTER.

FLATNESS OF TASTE

SO COMMON IN FILTERED WATER,

OBVIATED

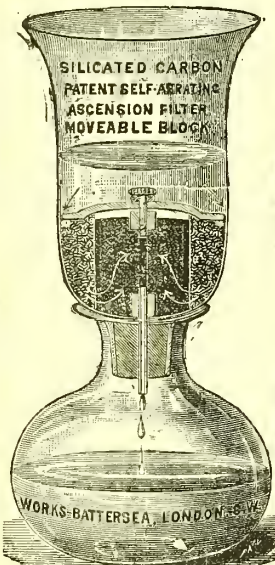
BY USING

SILICATED CARBON FILTERS AERATED

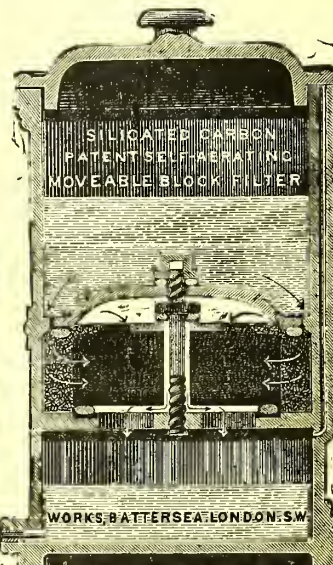
By means of which the water is Aerated and Filtered simultaneously, rendering it, even after boiling, Pure, Bright, and Palatable.

The Silicated Carbon Block can be Instantly Removed, leaving the whole of the Filter Open for Inspection and Cleansing.

LIBERAL DISCOUNT TO THE TRADE.



Glass Table Filters.



Domestic Filters.

LIBERAL DISCOUNT TO THE TRADE.

FOR PRICES AND FULL PARTICULARS, WRITE TO THE
SILICATED CARBON FILTER CO., BATTERSEA, LONDON, S.W.

"Stealing the Handcuffs."

"With this appropriate remark a correspondent [not B. W. & Co.] sends us a reprint from THE CHEMIST AND DRUGGIST of a clever advertisement entitled 'Pirates,' inserted some time since by Messrs. Burroughs, Wellcome & Co. The advertisement commenced—'They [the pirates] are getting rather numerous of late. They make bungling work of it. They copy what they think will do them most good, and not one of them has had the manliness to as much as say "by your leave, sir." They copy our advertisements, and in divers ways seek to deceive the public and steal our thunder.' At the foot of the circular on which this is reprinted is found the name " * * *, manufacturing and export Chemist, * * * ."—*Chemist and Druggist*, August 25, 1888.

THE CHEMIST AND DRUGGIST.

A GENTLE HINT.

Pirates.

They are getting rather numerous of late. They make bungling work of it. They copy what they think will do them most good, and not one of them has had the manliness to as much as say—"By your leave, sir." They copy our advertisements to make people believe that theirs are ours till they get into them; they have used our trade names which we have made popular and valuable by expenditure and work; they denounce the improvements we introduce, until, in spite of their underhanded manoeuvres, we secure the just appreciation of the profession, and then they make imitations in appearance, but not in quality; they pirate our trade names, and in divers ways seek to deceive the profession and steal our thunder.

To us it appears truly humorous that firms whose antiquity is their prime boast, and whose traditions harp upon the integrity of ancestral founders, should play such catchpenny antics. Having won by genuine merit and originality the confidence of the profession and trade, we can, so far as we ourselves are concerned, regard these puny pirates very much like the story of the bad marksman shooting at the frogs—it was sport to the one and didn't hurt the others. Still they give us a theme to descant upon. It is our duty to protect our friends.

When the lame man made a bargain with the blind man for the latter to carry him, they were neither of them in business worth mentioning, and the bargain was mutually advantageous; but for one who might both walk and see to saddle himself on to another is not delicate, to say the least. We feel that we can see and walk, and when those who might do the same try to ride on our industry it seems our bounden duty to point out to them how unbecoming their conduct really is.

We have become more or less used to imitators, and when the thing is done right handsomely it almost seems like a compliment; but to be a compliment it should certainly be free from the semblance of fraud. "Me too" has ever been the motto of trade pirates, and of those who have lost their grip and of those who never deserved.

For the edification and comfort of our imitating neighbours we offer an allegory—it is a very ripe chestnut, but a sound one; and here it is. Once upon a time—not so very long ago,—as the story goes, a company of soldiers were garrisoned in mountain wilds where there were Indians on the warpath. One day a tribe of Red Men were spied in a valley, and the soldiers were forthwith ordered out in great haste. They strapped a cannon on the back of a mule, and hastened away to give battle. When they reached the crest of a cliff they saw the war-dancers in the valley below.

They had no time to dismount the cannon, so turned the mule about as a gun-carriage and fired. The howitzer "kicked" so tremendously that it knocked the animal off his legs, and cannon and mule rolled precipitately down the hill into the midst of the Indians, scaring them nearly out of their wits, and frightening them into hasty retreat—all but one, who was so paralysed with fear that he allowed himself to be captured and taken to the camp. When interrogated as to why he allowed himself to be taken, he exclaimed—"Me no 'fraid soldier man, me no 'fraid of cavalry man, but when live jackasses fired me, me think the devil must be near."

Though we do not confess that we are timid, or much unnerved, the Indian's case is in some respects like our own. Legitimate business warfare may be engaged in with satisfaction, and we heartily applaud all new improvements and legitimate enterprise from whatever source they come; but who likes trade "jackasses" precipitated upon them as competitors?

Now, Imitators, we enjoin upon you to discard your schoolboy mimicries. We don't expect much of you.

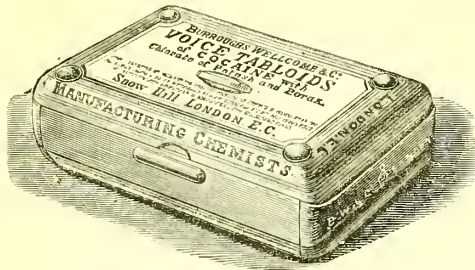
" * * * No earth-horn will
Could ever trace a faultless line;
Our truest steps are human still,
To walk unswerving were divine."

Still, "Be not too bold!" "Assume a virtue if you have it not." When you want a new name for one of your products (or imitations) give it a name that does not deceive. Give it a name that has not been made valuable by others' expenditure and industry. Give it a name that, when you make your sales, you can say to yourselves—"These do not rightfully belong to another." What is it to appropriate a trade name but to take what another has laboured for and that may become in all equity his means of subsistence? Sales thus made are dearly bought. A word more: we would suggest that those whose enfeebled intellects prevent them from creating anything original, and who find it necessary to copy our advertisements, might do so in such a manner that readers will not be led into mistaking and reading their pages for ours.

Those who have, through inadvertence, trespassed upon our rights, and who have made the *amende honorable* when we have called their attention to the trespass, we acquit of all wrong intent, and can but respect their frankness and honesty of purpose. Everyone is liable to tread unwittingly upon the rights of his fellow-men, but an honest man is ready to admit his fault and relieve his conscience. Wilful trespassers, who persist in wronging us, and thereby render themselves liable under the law, we have punished, and shall punish, with the utmost severity. Those who wilfully trespass upon our rights, but cunningly evade the liabilities of the law, we shall expose to the ignominy they so justly deserve.

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

NOTE.—This is a facsimile of the page advertisement referred to by "The Chemist and Druggist." The party who appropriated it copied it word for word except in substituting his name for ours. Some copy only the titles of our pages.—B. W. & Co.

VOICE TABLOIDS, composed of Cocaine, Chlorate of Potash and Borax.

Impart a clear and silvery tone to the voice. Easily retained in the mouth while singing or speaking. Now used by the leading singers and public speakers.

DIRECTIONS.—A single Tabloid may be slowly dissolved in the mouth to remove huskiness or hoarseness.

Supplied in beautifully graven white metal boxes, blue silk label, at 8s. and 16s. per dozen.

Above prices subject to usual discount.

BURROUGHS, WELLCOME & CO., Manufacturing Chemists, Snow Hill Buildings, LONDON, E.C.

HEARON, SQUIRE & FRANCIS

WHOLESALE AND

Established at



TRADE MARK.

EXPORT DRUGGISTS.

95 Bishopsgate St., 1714.

SELECT PREPARATIONS—"HERON" BRAND.

Cascara Cordial.

(For Habitual Constipation.)

Ess. pro Mist. Ferri Co.

Liquor Santal Co.

Pepsin Glycer. Acid.

Sol. Bismuth. Aromat.

Syr. Hypophos. Co.

Vin. Cocæ.

Cucumber Cream.

Cucumber Juice.

Cucumber Pomade.

EXTRACT OF MALT IN VACUO,

Keeps perfectly, and possesses the characteristic flavour of Malt.

INFANTS' FOOD MALTED IN BULK.

CONCENTRATED SOLUBLE ESSENCES,

For Flavouring Aerated Beverages.

ROLLED PILLS

UNCOATED AND GELATINE OR PEARL COATED.

5 COLEMAN ST., LONDON.



ESTABLISHED 1859.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICE:

NORMANBY CHAMBERS, MELBOURNE.

Published every Saturday.

Subscription 10s. per year, payable in advance; dating from the commencement of any month.

Post free to every country in the world. Single copies, 4d. each.

Cheques or Postal Orders should be payable to EDWARD HALSE, and crossed MARTIN & Co.

Supplied only to persons connected with the Trade.

For Australasian subscribers the subsidiary journal THE CHEMIST AND DRUGGIST OF AUSTRALASIA is included.

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POST-CARD COMPETITION.—No. 11.

CONTRIBUTORS to this department are requested to remind themselves that Christmas is approaching, and chemists, like other tradesmen, ought to be prepared to take the utmost advantage of the lavishness which purse-owners are apt to display at that season. Some of our correspondents think that chemists do not make as much out of their beautiful windows as might be the case; and the proposal is that during this month of November competitors shall send to us suggestions on post-cards for novel or effective window displays. It is hoped that from the combined wisdom thus contributed some suggestions may be compiled which, being taken advantage of, will enable many members of the trade to enjoy with extra satisfaction the little extra indulgences which even they will perhaps allow themselves. The usual guinea will be given for the post-card which is thought to give the most valuable hints. Suggestions may be illustrated by diagrams or not, as the writers please. Subscribers and their employes only are eligible to compete.

The "Treatise on the Art of Dispensing" may be obtained in America from our agent, Mr. Harry V. Dakers, 45 Liberty Street, New York, at \$1.

The "Treatise on the Art of Dispensing" may be obtained in Australia from the office of THE CHEMIST AND DRUGGIST OF AUSTRALASIA, price 5s.

"THE ART OF DISPENSING."

(Price 3s. 6d. net; post free, 3s. 10d.)

THIS work is now being reprinted, and we shall be able to fill orders towards the end of next week. We shall be obliged if orders are sent early either to us direct or to any of the firms named below. The latter will send it with goods at the published price; we can only supply it through the post.

Barclay & Sons (Limited), Farringdon Street, E.C.
W. Beasdale & Co., York.
Boileau & Boyd, 91, Bride Street, Dublin.
Burgoyne, Burdidges & Co., 16 Coleman Street, E.C.
Burroughs, Wellcome & Co., Snow Hill Buildings, E.C.
Clay, Dod & Co., Liverpool
Davy, Yates & Routledge, Park Street, Southwark, S.E.
Duncan, Flockhart & Co., Edinburgh
W. Edwards & Son, Queen Victoria Street, E.C.
Evans, Gadd & Co., Exeter.
Evans, Lescher & Webb, Bartholomew Close, E.C.
Evans, Sons & Co., Liverpool
Fletcher, Fletcher & Stevenson, North London Chemical Works, Holloway, N.
Glasgow Apothecaries Co., Glasgow.
Goodall, Backhouse & Co., Leeds
Harker, Stagg & Morgan, Laurence Pountney Lane, E.C.
Philip Harris & Co. (Limited), Birmingham
W. & R. Hatrick, Glasgow.
Hearon, Squire & Francis, Coleman Street, E.C.
Herrings & Co., Aldersgate Street, E.C.
Hill & Son, Southwark Street, S.E.
Hirst, Brooke & Hirst, Leeds.
Thos. Hodgkinson, Prestons & King, Bishopsgate Street, E.C.
Hodgkinson, Treacher & Clarke, 198 Upper Whitecross Street, E.C.
Hovenden & Sons, City Road, E.C., and Berners Street, W.C.
John Ismay & Co., Newcastle-on-Tyne
H. K. Lewis, 136 Gower Street, W.C.
Lynch & Co., Aldersgate Street, E.C.
May, Roberts & Co., Clerkenwell Road, E.C.
S. Maw, Son & Thompson, Aldersgate Street, E.C.
F. Newbery & Son, King Edward Street, E.C.
G. T. W. Newsholme, 74 Market Place, Sheffield
Oldfield, Pattinson & Co., Manchester
W. Paterson & Sons, 133 Gallowgate, Aberdeen.
Pinkerton, Gibson & Co., Edinburgh.
Potter & Clarke, 75 Weston Street, S.E.
Raines & Co., York
Raines, Clark & Co., Edinburgh
J. Sanger & Sons, Oxford Street, W.
T. & H. Smith & Co., Duke Street, Edinburgh
Southall Bros. & Barclay, Birmingham
Sutton & Co., Bow Churchyard, E.C.
John Thompson, Hanover Street, Liverpool
Thompson, Millard & Co. (Limited), Curtain Road, E.C.
J. Woolley, Sons & Co., Manchester
Wright, Layman & Umney, Southwark Street, S.E.

"HANDY BOOK OF MEDICINE-STAMP DUTY."

By E. N. ALPE, of the Middle Temple and the Inland Revenue Department, Somerset House. Price 2s. 6d., post free 2s. 9d.

THIS work gives a synopsis of the interpretations of the Board of Inland Revenue on doubtful points in the Medicine Stamp Acts. It shows the concessions which have been made by the Commissioners, and explains the reasons on which their interpretations and concessions are based. It may be ordered from the firms named in the list above, and can be supplied with goods at the published prices. We cannot send single copies to wholesale houses for enclosure.

THE CHEMIST AND DRUGGIST OF AUSTRALASIA, published monthly at our Melbourne office, can be supplied to subscribers outside Australasia at 5s. per annum, payable in advance, and commencing at any date. Chemists interested in the drug trade and the pharmaceutical affairs of the Australasian Colonies will find a full record of all events affecting their occupation in *The Chemist and Druggist of Australasia*. Single copies can be supplied at 6d. each. Application should be made by English or American subscribers to the office at 42 Cannon Street, London.

Metropolitan Reports.

CHEMICAL INDUSTRY CLUB.—This club has been formed for the convenience of the members of the London section of the Society of Chemical Industry, the ostensible object being to counteract "the inability of many members to attend the meetings because of distance, and the difficulty of dining and covering that distance in time for the meetings at Burlington House." The subscription is fixed at a nominal sum. The members of the club will meet at the Hotel Previtali, Arundell Street, Piccadilly Circus, monthly, on the evenings of the sectional meetings, at 6.15, for dinner at 6.30. The honorary secretary is Mr. D. Bendix, The British Alizarine Company, Silvertown, Victoria Docks, E.

CHARGE AGAINST A WHARF MANAGER.—Henry G. Ker, manager of the New Crane Wharf, appeared at the Central Criminal Court on Monday before the Recorder, Sir Thomas Chambers, Q.C., on a charge of stealing goods belonging to various colonial merchants. The circumstances have already been reported in this journal, and it will be remembered that the question raised was whether the goods found were or were not sweepings. The owners of the wharf had refused to prosecute, and said the explanations given were quite satisfactory. After evidence had been given, and Mr. Willis, Q.C., had opened the case for the defendant, the learned Recorder said there was not a tittle of evidence of felonious intent, and no question for a jury, and he ordered the discharge of the defendant.

PHARMACEUTICAL EVENING MEETING.—We do not recollect a time within recent years when the committee which has charge of the arrangements for the evening meetings of the Pharmaceutical Society have been so fortunate as to publish their programme three weeks before the date of the meeting. This is the case regarding the meeting to be held on November 14. The official announcement published last week gives the following as the papers to be read:—"Tartar Emetic Valuation," and "The Purity of Commercial Specimens of Tartar Emetic," by Professor Dunstan and Miss Boole; "Note on Ancient Materia Medica," by E. M. Holmes; "The Pharmacology of the Nitrites of the Paraffin Series," by Professor W. R. Dunstan.

SOCIETY OF CHEMICAL INDUSTRY.—The London section of this Society will resume its meetings on Monday, when papers will be read on "A New Form of Polarimeter for Brewers" by Mr. John Heron, and on "The Comparative Antiseptic Values of various Chemical Substances" by Mr. C. T. Kingzett. The following are the other items on the programme:—December 3, Mr. A. H. Allen, on "The Analytical Examination of Water for Technical Purposes"; January 7, 1889, Mr. C. Napier Hake, "Notes on Explosives"; February 4, Dr. T. L. Thorne, on "Some Industrial Applications of Oxygen"; March 4, Messrs. Higgins and Heron, on "Cider"; April 1, Dr. Percy F. Frankland, on "The Action of Water on Lead"; and June 3, Messrs. Newlands Bros., on "Improvements in Centrifugal Machines." In addition to these, papers may be expected from Drs. W. S. Squire and J. M. H. Munro, Mr. C. C. Hutchinson, Mr. John Ruffie, and others.

TAKING OVER A CHEMIST'S BUSINESS.—In the City of London Court, on October 26, before Mr. Commissioner Kerr, the case of *Jacobs v. Davis* was tried. The plaintiffs, Messrs. H. Jacobs & Co., 71 St. Mary Axe, E.C., sought to recover payment for goods supplied to the defendants, Messrs. John M. Davis & Son, chemists, of 89 Bishopsgate Street Without, E.C., in the course of their business. The defendants, while not disputing the plaintiffs' claim, set up a small counter-claim of £17s. 1d., also for goods supplied. The plaintiffs denied their indebtedness to the defendants to the amount of the counter-claim, and said the goods were supplied before February, 1887, when they became possessed of the business. The defendants still contended the plaintiffs were liable as they had taken the business over. The learned Commissioner found for the plaintiffs on the claim, and reserved the counter-claim, telling the defendants they could bring an action for it against the proper persons. Judgment accordingly, the plaintiffs' costs being allowed.

THE ASSAULT ON A CHEMIST.—At the Central Criminal Court on October 26, William Seaman (40), labourer, was

indicted for wounding John Simkin, chemist and druggist, 82 Berner Street, Whitechapel, with intent to murder him. The facts, which have been previously reported, were briefly that the prisoner went into Mr. Simkin's shop very late one night and asked for some ointment and alum. As Mr. Simkin was wrapping the articles up the prisoner attacked him with a hammer about the head and elsewhere, inflicting such injuries that his life for some time was in danger. The prisoner, in defence, asserted that the prosecutor refused to weigh the alum, and in consequence they had a quarrel. He did not know he had the hammer in his hand when he struck the prosecutor, and did not intend to strike him with it. The jury found the prisoner "Not guilty" of wounding with intent to murder, but "Guilty" of wounding with intent to do grievous bodily harm. A previous conviction of fourteen years' penal servitude for burglary in 1876 was proved against the prisoner, who was stated to have been sentenced to seven years' penal servitude before that. Mr. Justice Cave sentenced the prisoner to seven years' penal servitude.

A CHEMIST'S ASSISTANT'S LOAN TRANSACTIONS.—A singular action was heard on Friday in the Westminster County Court, in which Matthew Gelding, a chemist's assistant, of 147, Oxford Street, brought an interpleader action against Mr. and Mrs. Gaule, for the recovery of certain furniture seized by them from Edwin Gelding, a licensed victualler, late of Soho, but now of Chiswick. Mr. Rose-Innes was counsel for the claimant, and Mr. Wallace for the judgment creditors. Mr. Matthew Gelding gave evidence that in March, 1884, he lent his brother 10%, and on several other occasions paid small amounts on his behalf to creditors. Up to March of 1888 he had lent him 60%, and he then took a bill of sale on the furniture for 80%, leaving him another 20% on that date. The goods seized by the sheriff were those included in the bill of sale. Cross-examined: He was earning 40% a year in 1884, and was out of his apprenticeship in 1881. He saved about 20% a year, but did not bank it. He knew that his brother had borrowed money of Mr. and Mrs. Gaule, but he believed he had paid it back again. He was not aware that they had a judgment against him. He had lent money to other friends also, and had not taken any acknowledgment for it. The book produced had all the entries made in it, and the amounts he had lent. Mr. Sharp, of College Street, Camden Town, said that the claimant had paid in monies on behalf of Mr. Edwin Gelding. Mr. Wallace said he was unable to call evidence, but it seemed singular for a chemist's assistant to be able to lend these sums out of an income of 40% a year. He then took several technical objections, all of which his Honour overruled. His Honour said it seemed suspicious, but he was bound upon the evidence to give a verdict for the claimant with costs.

A LESSON IN COMMERCIAL LAW.—On Tuesday in the City of London Court, before Mr. Commissioner Kerr, an action was brought by the West of England Varnish Company against Mr. H. Coyle, of Warrender Road, Tufnell Park, to recover five guineas for goods supplied. The defendant said he was a clerk, and had never ordered the goods. Mr. Palmer (of Dunn & Palmer), who appeared for the plaintiff company, said he was unable to prove the order, as the traveller had left; but the goods were delivered and accepted, and the defendant had been giving them away. He was surely bound to take care of them. His Honour: Is that law? Mr. Palmer: He had no right to let the goods out of his possession. His Honour: Had you any right to put them into his possession? Suppose a tailor whom I never saw sends me a winter coat, and I find it in my hall when I get home, am I bound to keep it? Mr. Palmer: You would be bound to take reasonable care of it. His Honour: Nothing of the kind. I would be perfectly justified in tossing it into the street. Mr. Palmer: In this case the inference is that the defendant knew that the goods were ordered and delivered. His Honour: If I were to act upon an inference of that sort, anybody might open a shop and send parcels to every householder in the "London Directory." (Laughter.) You can't recover without proving the order. Mr. Palmer: I can't. His Honour: I suppose the traveller got his commission? Mr. Palmer: I am not aware. Defendant: Oh yes, he did. This was a bogus order for the sake of getting the commission. (Laughter.) His Honour: How do you know that? The defendant: I will tell you the whole "pedigree." (Laughter.) I met the traveller, who said, "How are you, old man?"

(Laughter.) I am in the varnish line, and want an order from you." I told him I had no use for varnish, whereupon he said, "Never mind, I will send it in, as I want the commission." Afterwards a quantity was sent to my house, and my little daughter took it in and signed for it. For that I chastised her. (Laughter.) When I met the traveller again I said I would send the stuff back, to which he replied, "Don't send it back, or I will be sacked. I can dispose of it in another way." (Laughter.) His Honour: And did you agree not to send it back to save him from being "sacked"? The defendant: Yes. His Honour: Then you must pay for it. Your own explanation has made you liable. (Laughter.)

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

BIRMINGHAM.

HUDSON'S.—The "dry soap" people have recently issued a small pamphlet, artistically got up with much gold and fine colours, and containing, amongst other useful items, portraits in colours of the English monarchs from William I. to the present reign, and giving notes of important events.

THE CUSTOMER WAS THE SMARTER.—A man went into a Birmingham pharmacy the other day, and said he had heard that pitch pills were a good thing for boils, and, as he was suffering from these troubles, requested to have a few for a trial. The pharmacist said he had none, nor did he offer to make them nor suggest that he should give him some suitable medicine, but went to his patents drawer and pulled out a box of advertised pills which he said would probably answer. The customer, who was a German Jew, inquired the price, and being told 1s. 1½d., said, "All right; I can get them at Mr. Blank's for 10½d."

COUNCILLOR BARCLAY AND HIS CRITICS.—A vigorous attack was made during the early part of this week on Councillor Barclay, who is seeking re-election to the town council, by Mr. Austen Chamberlain, son of Mr. Joseph Chamberlain. The "Young Obadiah," as he is facetiously called in Birmingham, charged Councillor Barclay, who is a member of the Finance Committee of the borough, with being a party to the wasting of 60,000% of the ratepayers' money by issuing corporation stock at a period when it was below par, but when there was a prospect of an early rise. Councillor Barclay, at a subsequent meeting of the electors, replied to the strictures of Mr. Austen Chamberlain in a very able style, and, in the opinion of his supporters, vindicated his conduct in a most satisfactory manner.

A DOCTOR OF DIVINE MEDICINE.—At the Birmingham Quarter Sessions on Wednesday Charles McLean, describing himself as a doctor and Baptist minister, was sentenced to five years' penal servitude for an indecent assault on a little girl of thirteen years of age, named Gertrude Eliza Paris. The prisoner, who announced himself as a doctor of divine medicine and a certified medical man, some time back gave a series of lectures in Birmingham. Hearing that the child was ill he called upon her mother and gave her his card, which read: "Mental Science College, 850 Market Street, and 8 Stockton Street, rooms 47 and 48, San Francisco. Mind-cure, psychology, and mind-reading successfully taught. Professor Charles McLean, M.D., former president of the Mind-Cure Association and editor of the science department of the *Mental Science Journal*, Chicago, is now organising a mental science college with charter rights to grant diplomas. Terms very reasonable." Thinking that the prisoner was a qualified medical man, the mother allowed him to operate on the child on three occasions, on each of which he indecently assaulted her.

HERB BEER SELLERS AND THE INLAND REVENUE.—There is considerable excitement among the herb beer sellers of Birmingham over the prosecution of various members of the trade for selling excisable drinks. Large placards have been posted all about the town, which read as follows:—"Important notice.—Public open-air meetings will be held

in this town and all the surrounding districts in a few days, to take the present condition of the herb and ginger beer question into consideration. The herb and ginger beer manufacturers and the general public are respectfully requested to come in their thousands and sign the petition in favour of a retention of a custom which has prevailed from time immemorial, and which is beneficial to all and injurious to none. The herb and ginger beer trade is in great danger of being annihilated. Exhibit, by signing your name, your strong feeling on this most important matter. Come, and by so doing you will render us valuable assistance in our endeavour to get Parliament to repeal the following obnoxious clauses in the Customs and Inland Revenue Act, 1835:—(1) 'The term "beer" in the Inland Revenue Act, 1830, shall be construed to extend to any liquor which is made or sold as a description of beer, or as a substitute for beer, and which on analysis of a sample thereof at any time shall be found to contain more than 2 per centum of proof spirit.' (2) 'In the construction of any Act relating to excise licenses for the sale of beer, unless there is something in the subject or context inconsistent therewith, the term "beer" wherever used in such Act shall have the meaning assigned to it by section 2 of the Inland Revenue Act, 1830, as extended by this section.'

EARTH BURIAL AND DISEASE.—A meeting in furtherance of the object of the Funeral Reform Association was held in Birmingham on Friday in last week, and was attended by many eminent medical men of the town and neighbourhood. Dr. Hill (the medical officer for the borough), who was among the audience, deprecated our present system of disposing of the dead, and strongly advocated cremation. Science, he said, might not be in the way of everyone present, but he would point to one scientific fact. Darwin had shown that earthworms go to great depths in dry weather, and that when they came up again in wet weather they brought up from human bodies which had died of infectious diseases the germs of those diseases. Pasteur demonstrated the same thing by experimenting with a cow that had died of anthrax. Sir Henry Thompson had said that certain prevailing diseases which were most difficult to account for—such as scarlet fever, typhoid fever, diphtheria, cholera, and so on—could not be exterminated as long as we buried the dead all around us, and let the dust of them, containing disease germs, get into our air and water. If this was the case, they must not allow any sentiment or prejudice to stand in the way of a radical mode of disposing of the dead.

BOURNEMOUTH.

THE WAR IS WAXING FIERCE HERE.—Boys with sand-wich boards are to be seen in the streets posting themselves in conspicuous positions, generally in front of the assailed chemists' windows, bearing boards containing the following announcement printed in bold letters in red and black ink:—

"Who brought down the chemists' extraordinary prices? Undoubtedly the

SOUTHERN DRUG COMPANY (LIMITED),

The original Cash Price List Chemists.

Whom do you patronise?

Those who have over-charged you for years and would do so again?

Those who upon principle have always charged and will charge the lowest remunerative cash prices?

With more of a like nature. Hours after the other chemists have closed the Drug Company keep open—gas full ablaze until nearly eleven o'clock at night. The chemists of this town, however, who have the confidence of the public and of the medical profession, treat these attacks generally with good-humoured indifference.

BRISTOL.

ALLEGED INDECENT PHOTOGRAPHS.—Mr. William Turner, chemist, Totterdown, appeared on Tuesday at the City Police Court, before the Mayor and Mr. J. Wills, on a summons charging him with selling a number of indecent photographs. About a fortnight ago the defendant was summoned to show cause why the photographs should not be destroyed, but he

did not appear, and Dr. Keal came before the bench and stated that an affection of the eyes prevented his attending. He was now in attendance. Mr. William Alexander Coote, secretary to the National Vigilance Committee, was the prosecutor, and Mr. Douglas Metcalfe, instructed by Mr. Coates, appeared for the defendant. The charge, as read over by Mr. Gore (magistrates' clerk), was to the effect that between the months of March and August of this year the defendant, at his shop in Wells Road, Totterdown, did sell and utter photographic pictures tending to the corruption of morals and good manners. Mr. Coote applied, in the absence of a barrister whom he had retained but was not present, that he might be allowed to open the case, but the bench ruled that as he was not a barrister or solicitor he could not do so. Evidence that had been taken on the former occasion was then read over. Ralph Rawling Maddison, who stated he was a clerk living in Sheffield Road, Barnsley, had his deposition read over to him. He was cross-examined upon it by Mr. Metcalfe, and said he wrote to the defendant that he wanted the photographs for artistic purposes. Mr. Metcalfe: Did you want them for artistic and draughtsman's purposes? Witness: Well, I am on my oath, and I do not care to answer that question categorically, because my ideas as to whether it would be necessary for the object I had in view were quite chaotic. On the question being repeated the witness said: My object was to elicit from Mr. Turner the extent to which his business demoralised those who bought the photographs. The witness proceeded to state something about colouring the photographs, upon which Mr. Metcalfe asked: Did you want to colour them yourself? Witness: No, the idea would be quite repulsive to me. Copies of a handbill issued by the defendant were produced, and the learned counsel called the attention of the witness to one line stating the photographs were "studies for artists' use," and to another line that A and B photographs were only supplied to parties giving their written assurance that they were required for artistic purposes. In answer to Mr. Gore, the witness said that he was the local agent of the Vigilance Society at Barnsley. He never saw such photographs before he had these from the defendant. Mr. Metcalfe asked if he had received any photographs from other persons, and witness replied in the negative. He also swore positively that he received three photographs produced from the defendant. Mr. Metcalfe said the defendant denied having forwarded to him the three produced; he never had such productions in his possession. Witness stated that he took action in the matter from what he had seen in the "Vigilance Record." No mention of Mr. Turner was made in the "Record." The learned counsel severely cross-examined the witness, and maintained that he gave evasive answers. Witness said he answered every question to the best of his ability. He admitted having written "dirty letters" to the defendant to give him the idea that he (the witness) was a "dirty man." Mr. Metcalfe: You did not get the kind of photographs you expected? Witness: Oh, yes, I did; these three are more than I expected. In the early part of the correspondence I wrote that I expected something more *recherché*. Mr. Metcalfe asked the witness to give him privately the name of his friend who had shown him the photographs in the first place before he communicated with the defendant, but the witness objected to do so, and said he had already been abused in a Barnsley newspaper for the part he had taken in the matter. Mr. Gore said the witness could decline to answer the question, as if two men had put their heads together and induced the defendant to commit an offence they might themselves be charged with a misdemeanour. Witness said he would tell all that took place between his friend and himself, but he must decline to give his name. Mr. Metcalfe asked that it might be entered on the deposition that the witness refused to give the name. Mr. Coote's evidence, taken on the former occasion, was read over to him, and he was briefly cross-examined. Detective-sergeant Robertson was called, and said on October 4 he accompanied Inspector Short and Detective Blacker to the shop of the defendant at Totterdown. "W. H. Turner" was over the door, and the defendant was a chemist. Inspector Short said that he had a warrant to search the premises, and then went into a room at the rear of the shop used as an office, and in a box that was locked found a number of photographs, some of which were purchased on the last occasion

and ordered to be destroyed. Altogether 129 photographs were seized. Some were returned to the defendant. Mr. Gore read the order made by the magistrates when the case was first before them, in which they adjudged eighty-two of the photographs to be obscene, and directed twenty-three to be kept as specimens and used in any further proceedings, and the others destroyed. In cross-examination witness said when Inspector Short and he went to the house of defendant, defendant gave them every assistance, and pointed out where the photographs were kept. They took the worst they could find. None were exhibited in the shop, and there was no notice in the shop to lead anyone to suppose indecent photographs were sold there. It was an ordinary chemist's shop. This was all the evidence, and Mr. Coote asked the magistrates upon it to commit the defendant for trial. The magistrates stated that they had made up their minds to commit to the assizes; and the defendant, on the advice of his counsel, reserved his defence. Mr. Metcalfe applied for bail, and the bench agreed to accept bail, the defendant in 200*l.*, and two sureties in 100*l.* each. The case was formally adjourned for a day in order that the depositions might be read over.

EAST DEREHAM.

A CHEMIST'S ACTION.—At the County Court recently, Walter White, chemist and druggist, Litcham, sued Henry Rix, Great Fransham, to recover the sum of 9*l.* 12*s.* 8*d.* for goods supplied from July 1, 1882, to February 25, 1887. 1*l.* 15*s.* was paid into court on behalf of the defendant, who admitted the last two items in the claim, viz., 10*s.* 11*d.* for goods supplied on January 1, 1885, and 1*l.* 4*s.* 10*d.* for goods sold since by plaintiff on February 25, 1887. Counsel for plaintiff stated that the goods were supplied to defendant's father, who died in 1882. Plaintiff continued to supply goods to the family (who carried on the farm) down to last year. The widow was the executrix. For defendant it was stated that he did not enter into occupation of the farm until 1884, and after that he was supplied with goods to the amount paid into court, which he was willing to pay. His Honour (Mr. E. P. Price, Q.C.) did not see how plaintiff could recover any more. He must sue the executrix, for on his own showing he had put himself out of court. Judgment would be given for the defendant.

EXETER.

A HIGHLY-DECORATED ADVERTISING VAN is now perambulating this city. Its purpose is to propagate the sale of the medicinal specialties of Dr. Rooke, of Scarborough. In addition to distributing the "Anti-Lancet" the conductor of the van gives away artistic brass trays, suitable for cigar ashes for gentlemen or pin trays for ladies.

NO COMPROMISE.—At the Castle of Exeter last week, Robert Stanton, a chemist's assistant, was summoned before the magistrates at the instance of Charles Wood for assaulting him. The complainant did not appear, but the defendant said they had settled the matter. The Chairman said the Bench could not consent to a compromise, and the case would be adjourned for a week for complainant's attendance.

LEEDS.

LEEDS CHEMISTS' ASSOCIATION.—The twentieth annual meeting of this association was held in the Church Institute on October 18, 1888, Mr. Peter Jefferson in the chair. The annual report and balance-sheet were read and adopted. The latter showed that the receipts for the year were 1*l.* 3*s.* 10*d.* in excess of the expenses. The number of members was reported to be three in excess of the previous year. Reference was also made to the educational scheme which has now been in operation for some five years, the first two years of which were devoted to lectures in materia medica, pharmacy, and pharmaceutical chemistry by Mr. W. Elborne. Subsequent to the termination of these lectures a two years' course of study in botany, elementary chemistry, and physics was sketched out and recommended to the associates, both day and evening classes being available. During this period no lectures were given in technical

subjects by the association. For the present session sixteen entries have been received for materia medica and fourteen for pharmaceutical chemistry, conducted as before by Mr. Elborne. The following elections took place:—President, W. Smeeton; vice-president, J. Abbott; hon. treasurer, J. Hurst; hon. sec., F. W. Branson; Council, P. Jefferson, W. D. Pollitt, S. Taylor, E. Yewdall, Geo. Ward, M. F. Greasley.

LIVERPOOL.

BALLOON ADVERTISING.—"Lewis's" are attracting the public by sending up a balloon to which is attached an effigy of Professor Baldwin, so arranged as to drop by means of a parachute when a certain height is reached.

CARBOLIC ACID AGAIN.—Early on Wednesday morning a woman named Mary Walsh, of 39 Beaufort Street, was admitted to the Southern Hospital, suffering from the effects of poison. It appears that the woman got up during the night, and, either by accident or design, drank about an ounce of carbolie acid. She was treated by Dr. Jackson, and remains an in-patient of the hospital. On inquiry on Wednesday evening the woman was stated to be likely to recover.

THE RECENT LARD PROSECUTIONS IN LIVERPOOL.—The summons against Mr. J. Downey, 71 Walton Road, has been withdrawn by the Health Committee, in deference to representations which had been made to them on behalf of the manufacturers that there had been an unreasonable lapse of time in instituting proceedings; but the committee stated that in no way was the court or the public to understand them to admit that the certificate of Dr. Campbell Brown was incorrect.

CHARGE OF "INHUMANITY" AGAINST MEDICAL MEN.—A correspondent, writing to a local paper with reference to the recent fatal fire in Falkner Street, complains that he ran for the nearest doctor, not far from Parliament Street, and, after explaining the case through the speaking-tube, the doctor shouted down in a curt manner, "I can't come." He then hurried to another doctor, and, after a considerable delay, was told he was ill in bed. The correspondent in conclusion expressed his opinion that it was time there was some law for compelling the nearest doctor to attend a case of great necessity.

MR. MUSPRATT ON THE CHEMICAL TRADE.—At a prize distribution to the successful students of the Widnes Science and Art School on Monday evening, Mr. E. R. Muspratt said that he thought the whole system of prize-giving and examination had an adverse influence upon the cause of education generally. On the Continent, in Germany especially, the system of education was superior to ours. . . . The trade and future of Widnes were imperilled. Formerly they had a practical monopoly of raw materials. They had coal very low in price in the immediate neighbourhood, and they had salt not very far off; and upon the cheapness of salt and coal depended their great manufactures, and upon them, too, the welfare of Widnes. Salt was going to be raised in price 50 per cent., and coal would become much dearer. The time had come, unless the trade of Widnes was to depart from it, and the great manufacture of alkali, copper extraction, and other trades carried on in Widnes were to be transported to other countries, when they must give a higher and a better education. There was too much talk about technical education; what was wanted was the more special and better teaching of science. He trusted, by the application of science to industry, they should be able to make greater strides than they had made in the past. If they were to hold their own against their competing rivals on the Continent and in America, they must rely upon a more thorough and better education, and that education must be of a practical and scientific character.

COMMERCIAL TRAVELLERS' SCHOOL DINNER.—The commercial traveller of to-day is a very different gentleman to Dickens's "bagman" of half-a-century ago. The dandified appearance of our modern "commercial" would have slain a Jean Brummel with envy. Such were the thoughts of a visitor to the annual dinner of the Commercial Travellers' School, partaken of last Friday in the Adelphi Hotel, Liverpool. Mr. Edward Evans, jun., of the firm of Evans, Sons & Co., Liverpool, occupied the chair, and won for himself un-

qualified praise for the extremely happy manner in which he discharged the onerous duties of chairman at a public dinner. The school, which is situated at Pinner, near London, is intended for the orphan children of *bonâ-fide* commercial travellers, and at present it accommodates 350 children, and has a steady income of between 12,000*l.* and 13,000*l.* a year. It gives several scholarships, and is not one farthing in debt. The loyal and local and special toasts were heartily supported by good speeches. Mr. Evans, in responding to the toast "The Chairman," said he had not been born with a silver spoon in his mouth, but he had been born with what was as good, or perhaps better—he had been born with the opportunity of making one. It was his pride that, his father leaving his business to his brothers and himself, the business had gone on increasing. He considered that one important element of success in his firm was that the most cordial and complete understanding existed between employers and employed. (Hear, hear.) Most of the assistants in the Liverpool firm were there that evening, and several from the London houses. Such good objects as they were then celebrating the firm had always supported, and they found that their support induced that of their employés. (Applause.) During the evening a sum of 500*l.* was collected for the school, and amongst the subscribers were:—Edward Evans, Esq., jun., 25 guineas; Evans, Sons & Co., Liverpool, 25 guineas; Evans, Lescher & Webb, London, 10 guineas; Thomas Beecham, Esq., St. Helens, 10*l.*; Burroughs, Wellcome & Co., 2 guineas; Duncan, Flockhart & Co., 2 guineas; Mr. Cockle, 2 guineas; Fry & Sons, 2 guineas.

MANCHESTER.

ADULTERATION.—In their annual report just issued the Nuisance Committee of the Manchester Corporation report that of the articles analysed under the Food and Drugs Act during the past year 163 were found to be adulterated. None of these articles were drugs.

SELLING BLACK BEER.—At the City Police Court on Monday, William Henry Delve, wholesale drysalter, 241 Stretford Road, Hulme, appeared before Mr. Headlam in answer to a summons charging him with having sold a bottle of Dantzic black beer, he not being in possession of an excise licence. Mr. J. T. Squire appeared on behalf of the Commissioners of Inland Revenue. He said that a magisterial licence was not required for the sale of black beer, but an excise licence was required. He might add that the sale of any beer which contained more than 2 per cent. of proof spirit could not be lawfully carried on without an excise licence. This black beer contained much more than 2 per cent. of proof spirit. Proof of the purchase of a bottle of the beer having been given, Mr. H. J. Helm, an analyst from Somerset House, stated that the beer which was obtained from the defendant contained 5.8 per cent. of proof spirit. Black beer consisted of a very strong extract of malt. Mr. Squire said this was the first prosecution with regard to black beer which the Inland Revenue officials had instituted, and they had no desire to press the case. The proceedings were brought in order to give publicity to the question. The defendant said black beer had been sold for generations without a licence, and the Inland Revenue, before making this change, should have given notice to the trade. Black beer was used as a medicine and not as a beverage. A fine of 5*s.* and costs was imposed.

NEWARK.

A MISSING DISPENSER.—The body of Henry Melbush, dispenser at the Newark Hospital, has been found on Plymouth Hoe. Deceased left Newark three weeks ago, and it was through a telegram sent to the Nottingham police, giving his description, that his remains were identified.

ROCHDALE.

A CO-OPERATIVE SOCIETY'S LABORATORY.—The educational committee of the Equitable Pioneers' Society opened a new chemistry laboratory last week for the use of their science students. For many years the laboratory has been stationed under the tailor's shop in Toad Lane, but this room was unsuitable, and the committee decided to remove the

laboratory to Whitworth Road Store. There was a formal opening on October 27. The laboratory under the tailor's shop was built about twelve years ago, at a cost of from 200*l.* to 250*l.* It was then considered that a cellar was the best and most convenient place for a laboratory, but it had been found that that opinion was entirely without foundation. The fumes from the laboratory annoyed the customers in the shop above, and also injured the cloth stored there.

Mr. R. W. Oddy, the teacher of the class, read the following short description of the laboratory:—

"The laboratory is fitted up according to the requirements of the Science and Art Department, South Kensington. It measures 42 feet by 33 feet and is 14 feet high. It is well lighted, being surrounded by windows. The extraction of vitiated air is accomplished by flues reaching to the top of the building. There are forty benches, each student having a working space of 3 feet 6 inches, and 2 feet 3 inches on the bench, which is fitted with table, shelves, reagents, and drawers, and cupboards for apparatus below the table. Gas is laid on to each bench, and water taps with specially prepared nozzle. Closets are provided for evaporation of substances evolving noxious fumes and for sulphuretted hydrogen work. These are ventilated by flues carried up the wall, so as to ensure complete extraction of the fumes. For organic work a Hoffman combustion hood is erected, and for honours students extra bench and gas arrangements are provided, with a balance-room in close proximity. The lecture-room contains specially prepared lecture-table, covered with lead and fitted with water-taps, gas, drawers, cupboards, shelves, &c. There is also an evaporating niche, surrounded with glass, which is connected with the ventilating trunks which carry off all noxious fumes from the room during the lecture. There are benches for forty students, and the lecture-room is capable of accommodating eighty students."

In reply to a question, Mr. Oddy said the Pioneers' students got exactly the same privileges for about 1*l.* as the students at Owens College got for 19 guineas.

RHONDDA.

MEDICATED WINES.—FINED THIS TIME.—At the Ystrad Rhondda police-court on Monday, before Mr. Ignatius Williams (stipendiary) and Mr. T. P. Jenkins, Thomas Richards, chemist, Treherbert, was charged with selling wine without a licence. Mr. Morron, Pontypridd, prosecuted on behalf of the Inland Revenue authorities; and Mr. Rhys, solicitor, defended. On July 19 an exciseman (Mr. Clearly) purchased, in defendant's shop, two bottles of Coleman's Liebig's extract of meat and malt wine with pepsine, one of which was sent to Somerset House for analysis, with the result that it was found to contain 24.9 of proof spirit. Mr. Harkness, the analyst, stated in evidence that the spirit consisted of port wine of very inferior quality—probably Tarragona. The extract of meat and malt, and pepsine added, were too infinitesimal to be estimated, and the percentage was made up of water and sugar. For the defence Mr. Rhys argued that under section 16, George II., cap. 8, chemists were exempted, and did not require licences to sell medicated wine. This, he said, had been established in a case heard at Cardiff, where the facts were on all fours with those in the present case. The stipendiary: Then that section ought to be repealed, I think. A chemist may certainly use a little wine or spirit in making up a medicine, but in that case the spirit becomes absorbed. Here the evidence shows that the thing was pure wine of very inferior quality, with traces of pepsine and meat so small that they could not be estimated. If that is allowed to pass as medicine there is an end to all wine licences. Mr. Rhys pointed out that the defendant had an assurance from the makers that no licence was required to sell the stuff, which was sold as a mixture. The bench imposed a penalty of 2*l.* including costs, and agreed to state a case for appeal.

STOCKTON.

"TEETOTAL" ALCOHOLIC DRINKS are having a hot time in this town at present, the drinks selected by the authorities for condemnation being "herb-beers." Last week there were several prosecutions, one of the most notable being that in which Henry Longstaff, herbalist, Norton Road, was the defendant, the charge being for selling a liquor containing

more than 2 per cent. of alcohol. Mr. Wm. Harkness, an analyst from Somerset House, stated that he analysed the sample and found it contained 6.4 per cent. of alcohol. In fact, it was as strong as public-house beer. Mrs. Longstaff said she made the beer herself and put in less sugar than usual. She only put in 7 lbs. to 12 gallons of beer. Mr. Harkness said the mischief arose from too much sugar being put in the beer. The defendant was fined 2*l.* including costs.

STOKE.

A DISHONEST ASSISTANT.—At the Police Court last Friday Joseph Cartridge, assistant to Mr. John Jones, Stoke, was charged with stealing three sponges, value 12*s.*, the property of his employer. The evidence showed that in April last a couple of sponges were missed from a case in the sponge room, to which defendant was the only person, besides Mr. Jones, who had access. A hole was bored in the ceiling of the room, and another assistant to Mr. Jones was secreted in the room above for the purpose of watching. On April 10, whilst so watching, he saw the defendant enter the sponge room and take a sponge from the case and carry it away. He gave information to the manager, who accused the defendant of the theft. At first he denied it, but ultimately admitted stealing the sponge, which, he said, he had concealed on the premises. He offered to point out where it was, but instead absconded. A warrant was issued, and he surrendered. Mr. Ashmall, who appeared on his behalf, said defendant had previously borne a good character. It was his first offence, and he had been led into it by impecunious circumstances through domestic affliction. He asked for leniency. Fined 20*s.* and costs.

WOLVERHAMPTON.

A CHEMICAL LABORATORY, erected for the use of the students of the Free Library chemistry classes, was opened last week by Sir William Plowden, M.P. The building with the furnishing and chemical apparatus has cost 435*l.* The laboratory will be under the charge of Mr. W. Whitehouse, teacher of chemistry.

IRELAND.

SIR GEORGE B. OWENS, one of the original members of the Pharmaceutical Society named in the Act of 1875, is very seriously ill.

FIRE.—The premises of Mr. Robert Clawson, druggist, &c. 64 Louisa Street, Belfast, were partially destroyed by fire on Tuesday morning.

ROYAL HIBERNIAN ACADEMY.—The Lords Justices of Ireland have approved of the election of Sir Charles Cameron, city analyst, to the chair of chemistry in the Academy.

CUTTING.—The following are a few of the latest items from a cutting suburban general store:—Cod-liver oil, 8 oz. bottle, 8*d.*; compound liquorice powder, 4 oz. bottle, 6*d.*; opodeldoc, 2 oz. bottle, 6*d.*; Gregory's powder, 4 oz. bottle, 6*d.* No wonder we hear a wail of "hard times" from the knights of the pestle.

THE PRICE OF COCAINE.—At a leading pharmacy in Dublin a prescription was dispensed a few days ago for a commercial traveller. It was a simple solution of six grains of hydrochlorate of cocaine in one ounce of distilled water, and the price charged was 1*s.* 8*d.* "Well," said the customer, "you Irish chemists do differ in your prices. In one place they charged me 2*s.* 6*d.*, in another 1*s.* 4*d.*, in another 2*s.* 2*d.*; you charge me 1*s.* 8*d.*, while in Belfast I have had it compounded for 1*s.*" The pharmacists of Ireland seem to aim at emulating the historic Kilkenny cats.

AMALGAMATION OF MEDICAL SCHOOLS.—An indignation meeting of the night students of the Ledwich School of Medicine, to protest against the discontinuance of night lectures, was held in the lecture theatre of the school on Monday evening, Mr. O'Donnel in the chair. It was resolved that a full meeting of the night students in the Dublin schools be convened by advertisement in the local papers for the purpose of preparing a memorial to the promoters of the amalgamation scheme, craving a continuance of their lectures for a period of at least three years.

HEARD IN THE VESTIBULE.—Scene: Hall of No. 11 Harcourt Street. Time: Publication of result of October examinations.

First Candidate: So you're not among the chosen, Moroney. What did they stop you for?

Second Candidate: Begor, thin, Fagan, I think it was fur me bad spellin', and I suppose me bad writin' had somethin' to do with it; and, faix, between you and me, I don't mind tellin' you as a fren', I think it was fur me general guinrance they stuck me.

PUZZLING.—Smith had got a sore throat, and thought he would call on his friend Jones, who had recently opened a smart pharmacy, and get him to look at it.

Jones (peering down Smith's throat): Which side do you feel pain at?

Smith (speaking under difficulties, Jones's best pill spatula being almost down in his larynx): 'Tide 'tide.

Jones (looking learned): Coming up or going down?

Smith (suddenly ejecting the spatula, &c.): Coming up. And it came up.

THE PHARMACY BILL.—Some surprise has been excited among the members of the Pharmaceutical Society of Ireland by an official circular issued from the office of the Society and signed by the President. The object is to induce each to use his influence with his parliamentary representative, so as to secure his presence and support on November 14, when the second reading is expected to be proposed. He is asked to urge strongly on the said representative—first, that the safety of the public is at stake; and, secondly, that the opposition which has developed comes from a few wholesale druggists who are directly interested in an indefinite continuation of the present state of things. It is not clear how his latter statement is arrived at, and it takes some faith at his time on the part of careful readers of pharmaceutical literature to adopt the assumption that the public safety was the main object aimed at in preparing the Bill.

SCOTLAND.

EDINBURGH.

THE MEDICAL SCHOOL of our university continues to flourish. Sir William Muir, the principal, stated the other day in his inaugural address that the number of medical students in 1833-34 was 718, but this year there are 1898 attending the medical classes.

FLY-PAPERS are generally laid away by the time the season is advanced so far as it is now. The abnormally mild weather has, however, brought out *musca domestica* with his life and family for a little additional holiday business before really lying up for the winter. A friend tells us that the insect was in greater numbers last week in his domestic laboratory than at any time during the summer. There has consequently been a renewed demand for the illustrated literature in which, housewives appear to believe, *musca* delights.

THE CUTTING WIND VEERS SOUTH.—Last week the Scottish Drug Depot (Limited), who continue to advertise themselves as "chemists, druggists, tea merchants, and long importers," opened a branch at 16 Nicolson Street, close to Surgeons' Hall, and they have notified the fact by column advertisements in the principal Edinburgh and Leith newspapers. In addition to advertising that "prescriptions are dispensed by fully qualified and registered chemists at half the Edinburgh chemists' prices," it is notified that attendance is given both day and night—something new for these "cutting" shops. The lines specially advertised are—"Pearls' soap, 3s. 3d. per dozen; iron pills (Blund's—*sic*), 1s. per gross, three gross 2s. 9d.; pure quinine, 2s. 6d. per oz.; and finest Norwegian cod-liver oil, 8 oz. bottles, 7d." The public are cautioned against the use by others of the distinctive title, "Drug Depot," which this company claims for its very own. The opening of this branch of the depot is not regarded, writes a correspondent, in a very serious aspect by the legitimate chemists on the South Side. The amount of new paint visible on the exteriors of the shops of Mr. Linton and Mr. Wyllie, who are nearest, indicates that they at least do not intend to cave in. Mr. Linton calls his

place "The Nicolson Street Drug Depot," and Mr. Wyllie names his "The College Street Drug Store."

GLASGOW.

THE EXHIBITION will close on November 10. It is interesting to note that the attendance up to and including October 23 was 5,034,605, and as the attendance is on an average about 30,000 per day, it is quite on the cards that this exhibition will beat the Indian and Colonial, which was far ahead, so far as attendance goes, of all others which preceded it.

ASSISTANTS are complaining of their hours of labour and remuneration. One writes:—"My hours are from 9 till 9 five days of the week, and from 9 till 11 on the sixth. On Sunday I attend from 10 till 11, 1 till 2, and from 5 till 8. During my week I thus give 76 hours of my valuable time, for which I am rewarded with the salary of 10s. per week. I am quite aware that there are worse cases than mine, both in regard to hours and salary. As far as my experience goes a chemist's assistant or a doctor's assistant is supposed to get along without salary."

AN ALARMING FIRE broke out in the wholesale department of the New Apothecaries' Company, 57 and 59 Glassford Street, about midday on Thursday of last week. The fire appears to have originated in premises at the back used as a store for turpentine, castor and other oils; from thence it rapidly extended to an adjoining three-storey building containing an extensive stock of general drugs. Little flame was to be seen, but the smoke and fumes arising from the burning chemicals were dense and nauseous, and occasional slight explosions excited apprehensions regarding the safety of the warehouses and public offices in the neighbourhood. The fire-brigade were promptly on the spot, and in the course of an hour mastered the flames. While they were at work intense excitement was caused by a report that several girls were in the building. This was found to be true, and the firemen just managed to rescue them in the nick of time. The damage done to the premises of the Apothecaries' Company amounts to between 1,200*l.* and 1,300*l.*, and is covered by insurance.

GREENOCK.

THE bondholders of the New Harbour Trust have appointed a committee to select suitable gentlemen to represent their interests in the trust. Mr. Archibald McNaught, chemist, is one of the several gentlemen whom the committee have nominated.

PAISLEY.

AN EPIDEMIC OF MEASLES prevails in the town at present. At a meeting of the School Board held last week it was reported that there were 975 children absent from the schools under their care on account of the outbreak. Private schools had reported 261 absent from the same cause, making together a total of 1,236. There are also several cases of scarlet fever. Chemists are doing a—shall we say—healthy business in disinfectants and antifebrile remedies. Good old milderer seems to hold its own against newer and more pretentious aspirants in the latter category.

SULPHONAL.—Some more medical reports have been publishing confirming the earlier opinions in favour of this substance. Dr. Matthes records in the *Centralblatt, f. klinische Medic.* the results of a series of clinical trials of the soporific, which were carried out under the supervision of Professor v. Ziemssen in Munich. The doctor gave ninety-nine single doses to twenty-seven patients, and the therapeutical virtues of the compound may be judged from the fact that a complete effect was obtained in 72 per cent. of the administrations, while in 9.25 per cent. the remedy was somewhat less successful; making 81.25 per cent. of cases in which it more or less accomplished the desired end. In 18.75 per cent. of the total number of times it was given the results were negative. The dose was found to vary with the individual, so that no hard and fast line of maximum and minimum could be drawn. For a majority of doses 15 grains was found to be sufficient, and in all instances it was observed to be desirable to administer the compound some hours before the sleep was desired, as its effects are only slowly produced. It is preferable to other hypnotics in being free from taste and odour, and without any tendency to interfere with the vital functions.

Pharmaceutical Society of Great Britain.

OCTOBER EXAMINATIONS.

THE Board of Examiners for England and Wales met at 17 Bloomsbury Square, W.C., on October 17, 18, 19, 24, 25, and 26, when the following were examined and declared to be qualified as understated:—

MAJOR EXAMINATION.

(For registration as Pharmaceutical Chemists.)

Browne, Frank, Northampton	Mander, Alfred, Coventry
Brυνee, Arthur, Thorne	Mead, Fredk. Jas., London
Bulmer, Bethel, Pickering	Scott, Richd. Forster, London
Gwillim, Walter R., Abergavenny	Spargo, Herbert, Newcastle-on-Tyne
Hogg, Jno. Alex., Edinburgh	Tall, Fredk. Chas., Newbury
Howell, Alfred, St. Clears	White, Wm. Louis, Littleport
Jennings, Richd. T., Tewkesbury	

MINOR EXAMINATION.

(For registration as Chemists and Druggists.)

Adam, Jas. Bell D., London	Kerridge, Herbert M., Ipswich
Allez, Peter A., Guernsey	Kington, Geo. Thos., Bath
Allwood, Wm. Hy., Wellington	Knighton, Thos. Wm., Staveley
Auklaud, Wm. Hy., St. Mary Cray	Knowles, Louis, Leicester
Barnes, Geo. Arthur, Beckington	Lewis, David Jno., Aberystwith
Elabey, Jno. Robert, Woolton	Loxley, Chas. H., Doncaster
Blomfield, Thos. N., London	Madge, Hubert A., Ottery St. Mary
Botterill, Fredk. Wm., Otley	Marsden, Fredk. S., Snaith
Bransby, Chas. Kirby, Manchester	Martin, Wm. M., Reimth
Buddles, Wm., Caistor	Milligan, George, Manchester
Burton, Arthur L., Sudbury	Moore, Jas. Temple, Southsea
Bu-bby, Arthur, Manchester	Neale, Fredk. H., Liverpool
Carter, Thomas, Hereford	Palmer, James, Oxford
Clayton, Jno. James, Oswestry	Parker, Chas. Fredk., Liverpool
Coates, Arthur, Belper	Pasco, George S., London
Colebank, John, Carlisle	Richards, Harry, Blandford
Collis, Chas. Bertram, Plymouth	Roberts, Griffith, London
Comyns, Joseph R., Maryport	Roberts, Wm. Arthur, Bangor
Davy, Harry R., Leicester	Rogers, Ernest Hy., London
Dawson, Wm. T., Norwich	Rudd, Hy. Bulmer, Bradford
Dodge, Edmond, London	Secombe, Chas. Wm., Southampton
Donaldson, George, Portsea	Slater, Edwin, Blakenhall
Drabble, Thos. Lamb, Holbeach	Smith, Sidney, Birmingham
Drinkwater, Jas. W., Beswick	Stent, Fredk. R., Bath
Duff, Wm., New Thornton Heath	Sturges, Francis Wm., Belgrave
Enoch, Albert Jno., Newmarket	Sugden, Steph. H., St. Anne's-on-Sea
Eyles, Jno. Robert, Newbury	Surfleet, Arthur Geo., Gainsborough
Furney, Frank, Warminster	Taylor, Wm. Carey, Southport
Galloway, Wm. H., Harrogate	Tonkins, Wm. H., Oxford
Gantlett, Henry, Wolverhampton	Toone, Arthur Hy., Warminster
Garfett, Wm. Thos., Portsea	Walsley, George, Kingston-on-Thames
Grayson, Jno. Hy., Whitehaven	Wansborough, Edwin G. L., Barrow-in-Furness
Harding, Hy. G., Ealing	White, Jas. Carter, Gainsby
Hatfield, Geo. Wm., London	White, Woolmer R. D., Landport
Hebbeler, Karl, London	Witherson, Albert Hy., Ep-om
Hender, Walter C., Plymouth	Willsher, Chas. G., Dover
Hepworth, Jno. S., Hyde	Wiseman, David Wm., London
Hill, Wm. Hy., Wolverhampton	Wood, Jno. Beaumont, Huddersfield
Jackson, Fredk. Wm., Blackpool	Woodcock, Thos. Jno., Norwich
James, Wm. M., Market Drayton	Woolley, Evan Edwd. G., Llanidloes
Johns, Thomas, Woolwich	
Johnstone, Edwd. S., Whaley Bridge	

PRELIMINARY EXAMINATION.

THE Board also received the report of the College of Preceptors on the examination held on October 9. (The questions were printed in our issue of October 13.)

Two hundred and sixty candidates had presented themselves for examination, of whom one hundred and twenty-one had failed. The following one hundred and thirty-nine passed, and the registrar was authorised to place their names on the register of apprentices or students:—

Abbott, John, Lazonby	Ball, W. H., Newcastle, Staffs.
Ahlicr, Ernest, Jersey	Batty, T. E., York
Alcock, James Elsworth, Sheffield	Belbin, H. A., Sheffield
Armbricht, E. L. N., London	Bell, John, Dumfries
Arrowsmith, P. C., Newcastle-on-Tyne	Bell, R. W., Newcastle-on-Tyne
Asford, F. C., Northampton	Bentley, C. S., Sheffield
	Bloor, F. A., Southport

Blount, G. W., Newcastle-on-Tyne	Lean, Henry Sproston, Liverpool
Brack, D. G., South Shields	Leece, Bernard Wrapston, Malton
Brewer, W. J., Redhill	Lockett, Frank, London
Brigham, J. G., Thornton Watlass	Lodge, Fred., Wakefield
Broom, G. A. C., Llanelly	McLeish, Edward, Loehee
Brown, Christian Charles, Tintern	McPherson, Fredk. C., Burghhead
Brown, William James, Dover	Mannifield, William, Sheffield
Brownbill, Edward, Wakefield	Mannox, Gertrude A., Sutton Coldfield
Burgess, F. W., Wigan	Maxwell, John, Kelso
Burton, J. L., Bradford	May, George H., Marlborough
Burn, George, Arbroath	Menzies, George Wilson, Dalbeattie
Burnett, William, Montrose	Murray, William, Middlesbrough
Capper, Arthur, Liverpool	Myers, Gabriel, Brough
Carter, J. T., Middlesbrough	Neatherecoat, Harry William, Ely
Clay, Arthur, Leeds	Nicolson, David W., Edinburgh
Clay, David Lloyd, Holyhead	North, G. D., Barton-on-Umber
Cockhill, J. S., London	O'Reilly, Thomas, Bracknell
Cole, W. H., Bristol	Paic, William John, Oxford
Coleman, John H., Wolverhampton	Pearce, William Forward, Brixham
Connal, William, Greenock	Pettingell, Frank Ernest, Hull
Cooch, Wm. Albert B., London	Pimlott, Thomas Herbert, Eecles
Cowan, Hugh, Ayr	Plant, Walter Edward, Rugby
Cripps, Ernest Charles, Maidenhead	Prickett, Owen, Burry Port
Crombie, James, Perth	Priestley, John A., Laisterdyke
Curtis, John, Newport, Salop	Pugle, Robert, Machynlleth
Davies, Philip P., Tunbridge Wells	Purdy, James Wm., South Shields
Davies, William George, Cardiff	Read, Harold McLain, Alnwick
Doggart, Robert Hamilton, Perth	Richards, Gwen-Joline E., Bangor
Douglas, Frederick Albert, Wigan	Roberts, Francis Wm., Banbury
Douthwaite, Frank, Beverley	Roberts, William E., Menai Bridge
Duckworth, William, Bradford	Rogers, Jos. Edwd. Gilbert, London
Eedes, John W., Goudhurst	Roper, Frederick George, Kendal
Egginton, John Tertius, Sedgley	Routley, Owen, London
Ellington, Charles S., Rochester	Russell, John, Glasgow
Ellis, William Neale, Peterborough	Shaw, Robert, Sheffield
Freeman, Arthur O., Brierley Hill	Shove, Bertha, London
Galloway, Philip Henry, London	Simpson, L. D., Berkhamstead
Goldsworthy, William, London	Sloan, Charles Alex., Dumfries
Gordon, Richard Matur, Elgin	Smith, Alfred Jason, Gloucester
Gregory, John, Stockton-on-Tees	Stead, Samuel Blower, Widnes
Hair, Lewis, Derby	Stephens, Frank Robert, Clevedon
Hall, John Arthur, Coventry	Stone, Ernest Sidney, Hastings
Hare, James Archer, Hexham	Stones, Jno. Whitehead, Manchester
Harry, Benjamin, Carmarthen	Stratton, Godwin, Newport, I. W.
Hastwell, Wilbye, Kendal	Taylor, William Stewart, Buckie
Hatton, Pester James, Weymouth	Thorpe, Arthur Muxlow, Spalding
Heath, Harry Llewellyn, Alcester	Urry, John Francis, Birmingham
Henderson, James J., Edinburgh	Walker, George, Keith
Hill, Lawrence, Sheffield	Wallwork, James, Tydesley
Hough, Thomas, Northwich	Wardley, T., Dalton-in-Furness
Hoy, Charles, Cupar Fife	Wheeler, Ernest John, Eastbourne
Hughes, William, Birkenhead	Williams, James, Carmarthen
Hume, John, Dalbeattie	Williams, Wm. George, Southport
Humphreys, Griffith R., London	Willis, Charles Alfred, Lindley
Hunter, Oliver, Wigan	Wilson, George Clark, Glasgow
Jackson, Wm. Kendall, Bradford	Windle, Clarence Parker, Bury
Jenkin, James, High Wycombe	Withers, John Thomas, Haslar
Johnson, Walter T., Birmingham	Wolstenholme, William, Sheffield
Judd, Walter Russell, Liverpool	Wood, E. T., Stonehouse, Devon
Kirk, A. J. E., Ramsey, I. of Man	Woodward, John Thompson, Hull
Kirk, John, Alloa	Wrench, Frederick Wm., Silverdale
Knight, John W., Leicester	Wright, James Geddes, Kirkcaldy
Lambert, Ernest Harold, Parsley	
Lane, Arthur Robert, Nottingham	

TINCTURE OF CASTOR is, it is said, a remedy for morphia mania.

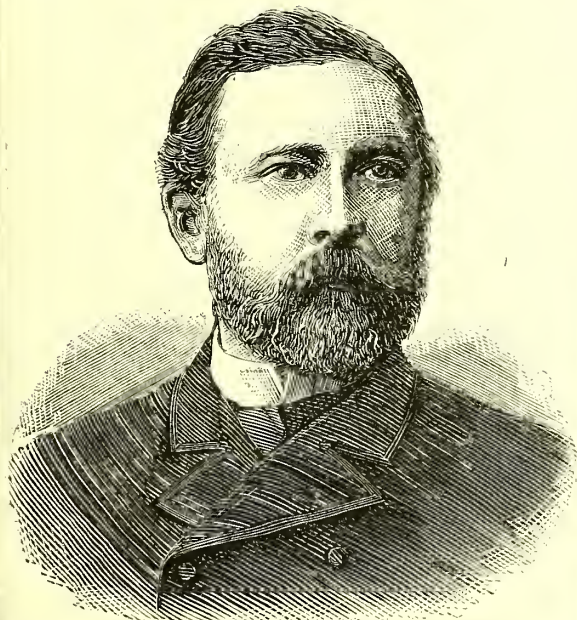
A NOVEL WAY TO KILL FLIES, and for that matter it is also a novel way to use insect powder. A Louisville druggist is the discoverer of it. His shop was infested with flies, which had a particular fondness for syrups of the soda water fountain. He did not care to place poisonous fly-papers here, and insect powder used in the ordinary way would not have looked nice; but he accidentally discovered that the powder is of almost as rapid combustion as gun-powder, and that a portion of the powder thrown from the balloons through the flame of a lighted match held 6 inches away produces the required flame, and is capable of destroying flies by the million. He therefore puts out some bait for them every morning. When they have collected in sufficient numbers he gets his powder and match, and the work of destruction is sure and swift, the remains being dumped into the street by the gallon.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

THE OLIVE CROP.—Reports from the southern departments announce an abundant crop for this year. Two years ago the yield was a large one, but this time it promises to be still larger. In the neighbourhood of Arles, for instance, the olives are so plentiful as to literally cover the trees. The growers are of course jubilant, the more so that, except in 1886, they have suffered from a long series of bad crops. The consumers will not complain either, as the olive oil produced in those districts is of exceptionally fine quality.

IS THERE OXYGEN IN THE SOLAR ATMOSPHERE?—Astronomer Janssen, now on a scientific excursion on Mont Blanc, wrote last Monday to the Academy of Sciences that he had completed his observations of the sun's atmosphere. From the Grands Mulets station, at an altitude of 3,000 mètres, he ascertained the complete absence of the water and the oxygen rays in the spectrum. He concluded therefrom (1) that at such altitudes no moisture is left in our atmosphere, and (2) that the oxygen rays observed in the spectrum are due to the water present in the air of lower stations. Yet he would not go so far as to affirm that the solar atmosphere contains no oxygen, only if it does the gas attains there such a temperature as not to manifest its presence in the spectrum.



M. PEYTRAL,

Minister of Finance, and formerly a wholesale druggist at Marseilles.
Now advancing to probable shipwreck with his Income-tax Bill.

ATTEMPTED POISONING BY A SOLDIER.—A battalion of the 75th Foot, now at Romans, near Montelimart, last week narrowly escaped wholesale poisoning. A private, named Haquais, employed as secretary by the major in command, forged an order for 300 grams (10 oz.) of arsenic, signed it with the name of the surgeon-major, and presented it to a city pharmacist. As the order looked genuine, and bore the doctor's seal, the pharmacist delivered the poison; but, having some misgivings, called soon after on the surgeon-major and showed him the document left by a private, to him unknown. The doctor at once detected the forgery, and, all the men being ordered out, Haquais was identified by the pharmacist and his assistant. In consequence, the culprit was locked up, and the morning ration of soup, ready to serve out, was withdrawn and set aside for examination. It

is presumed the man's intention was to poison the whole battalion.

PHYSICIAN PUNISHED FOR PRACTISING PHARMACY.—The Poitiers Court of Appeals has just confirmed a judgment of the Le Mans Court sentencing Dr. Melic to fine and damages for unlawful practice of pharmacy. According to French law, a physician has no more right to dispense medicines than a pharmacist has to prescribe them. Yet, in localities unprovided with a pharmacy, physicians are allowed to dispense medicaments at their residence, although they may not keep an open *officine*. Dr. Melic was prosecuted by the Sarthe Department Pharmaceutical Society for having kept dépôts of medicines in several villages. True, no regular pharmacist's *officine* was open within the lawful distance; but the localities in question were not the doctor's residence, and the Pharmaceutical Society contended the law's toleration was not meant to apply to any but the physician's actual place of residence. Both courts held the Society's interpretation to be correct, and sentenced Dr. Melic to pay a fine, besides damages, to the Sarthe Association. The fine was a small one and the damages merely nominal, but the principle has been vindicated.

A LEGAL DEFINITION OF THE WORD "WINE."—On Oct. 23 the Senate passed a bill on wine making and selling, which includes the following provisions. (1) The name "wine" shall apply only to the fermentation product of fresh grapes. (2) The product obtained by fermenting the pressed marc with sugar and water shall be offered for sale under the name of "sugar wine" (*vin de sucre*). (3) The product obtained by fermenting dried raisins and water shall be sold only under the name of "raisin wine" (*vin de raisins secs*), and said name shall apply to all mixtures of it with wine in any proportions whatsoever. (4) All containers holding the two latter products shall be marked in large letters, "vin de sucre" or "vin de raisins secs," according to the case, and the names shall be repeated on all invoices, bills of lading &c. (5 & 6) under penalties of 25f. to 500f. fine, and ten days' to three months' imprisonment. (7) All additions to wine, sugar wine, or raisin wine, either during or after fermentation, of fermented or distilled figs, caroubs, mahwa-flowers, rice, barley, or other sweet matters shall be considered adulterations, and punished according to existing laws. Dealers and retailers shall be responsible for the purity of their goods, and in some cases confiscation may be ordered.

AERIAL NAVIGATION.—Parisians have always been fond of ballooning. This sort of sport is as common here as brass bands in Brussels. But of late a useful feature has been introduced, namely, the plan of starting several mounted balloons at the same time, and offering a prize to the one who will land nearest to a given locality and reach it first. It is astonishing how close to the spot some of the old navigators—they cannot be called tars, unless it be coal-tars—will manage to land their air-ships. For instance, on Sunday, Oct. 21, they started together eight ordinary spherical balloons, filled with common coal-gas, the objective point selected being Chevreuse, about sixteen miles in a south-westerly direction. The expert Louis Godard succeeded in landing at Laverrière, within three miles of Chevreuse, in a convenient plain. And his success was not due to mere luck, as he is reported to have done as well on other occasions. On this the seven other starters rose too high up, and went due west, in the direction of Marly. Captain Godard, on the contrary, according to the account of one of his passengers, having observed the direction of the clouds and the smoke of houses, sailed his ship closer to the ground. While one of his men kept feeling the wind by dropping overboard little squares of cigarette paper, the skipper sat holding the valve-rope in one hand, and in the other the sand ballast which he dealt out most parsimoniously. In this way he kept within the proper current, a slow one, and in fifty-five minutes cast anchor at Laverrière, where the passengers were landed, as gently as down, near the railway station. On Sunday October 23 ten balloons started, the jury having chosen for goal Senlis, about twenty-seven miles, almost due north. The wind was south-east by south. The race was a close one, three starters having landed between two and two-and-a-half miles of the place, namely, Captains Godard, Hache, and Gillon, while none of the balloons went much out of the way. No decision has been rendered yet by the jury. Although made on a small scale, experiments of the sort are attracting no little scientific interest.

EDINBURGH CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.

THE opening meeting of the eleventh session was held in the Pharmaceutical Society's House, 33 York Place, Edinburgh, on the evening of Wednesday, October 24, at 9.15, Mr. George Coull, president, in the chair. There was a very large attendance.

Letters of apology for absence were received from Provost Watt, Haddington, and Messrs. J. B. Stephenson, G. D. Mackay, Edinburgh, and John Nesbit, Portobello.

The minutes of last meeting having been read and approved, the President delivered an

INAUGURAL ADDRESS.

This address was given with a quiet force and heartiness that added to the pleasure with which the large audience listened to it. We select a few of the more important passages.

WHAT GOOD DOES THE ASSOCIATION DO?

Replying to this question, Mr. Coull said: Well, when within our own ranks we find men who can ask such a question as that, I think there is room for remark by way of enlightenment. When we find suggestions made by our members adopted in the Pharmacopœia, when we find we are cited as a model Association and copied by others, when we look at our prize schemes for apprentices and find the amount of good we are doing in stimulating the younger members to study, when we look at the friendships which have sprung up through members being brought in contact with each other by attending our meetings—friendships destined to be lifelong, I trust—then I think we may safely say our existence is not in vain.

TEACHING AND EXAMINATION

were the subject of the next passage of the address, in the course of which the speaker remarked that Sir H. E. Roscoe, in his recent address at Bloomsbury Square, had just given expression to his own thoughts, that examination is only the hall-mark, and teaching the true gold. It must be admitted that many cram up to pass an examination and do pass, and yet have a very hazy idea of their subjects; so if you put a hall-mark on that kind of knowledge, he said, "it is a false hall-mark. But in going through a complete course in any subject you have more chance, if you study your lectures regularly, of gaining a mastery of your subject, than you would have in a much more extended course of private reading. The lecturer emphasises the salient points, pays attention more to general principles than to mere isolated facts, and leaves out a great deal of useless detail with which you would otherwise burden your mind. Besides, you have a certain amount of ground gone over every day, and no consideration whatever ought to prevent you from learning what you have heard during the day." After a brief reference to apprenticeship and the curriculum, the speaker proceeded to lay down the opinion that the best way for

COPING WITH THE STORES

is to qualify, and qualification with him means the Major title. "When the Major is passed," he said, "keep up your knowledge of old drugs and increase your knowledge of new ones, and so gain the confidence of medical men, and the confidence of the public will soon follow. Of course there are people whose confidence it is no use trying to gain—people who will pass the door of a man who sells Pears' soap at 4½d., expend 2d. in cars to and from a store where it is sold at 3½d., and come home perfectly happy with their bargain. Such people are found everywhere."

The transition from the new ways of doing business to

NEW REMEDIES

was successfully effected, and it was specially pointed out that it is very convenient for medical men to get any information regarding new remedies from pharmacists, and it will do much to increase their esteem for and confidence in the latter. But Mr. Coull's notion regarding new remedies took a higher flight than usual, for in the belief that there is no doubt in the minds of any who have watched the progress

of events in the pharmaceutical world that the remedies of the future will be mainly composed of those new synthetical products which at present come chiefly from Germany, the major portion of the address was directed to show that, the constitution of synthetical products being accurately known, their physiological action can be determined with a degree of certainty.

THE BEGINNING IN THIS LINE OF STUDY

was effected more than twenty years ago, when Crum Brown and Fraser showed the connection between chemical constitution and physiological action. Most of you know something of the connection between chemical constitution and physical properties, as, *e.g.*, in the marsh gas series of hydrocarbons the boiling point of the liquid members of the series rises about 19° C. for every increment of CH₂. It is also a fact that hydrocarbons with long formulæ are not so volatile as those with compact formulæ, *e.g.*, normal butane is not so volatile as isobutane. The former can be condensed to a liquid at + 1° C., the latter at - 17° C. These examples could be multiplied, but they will suffice. Well, Professors Crum Brown and Fraser, experimenting with strychnine, showed that, by modifying its chemical constitution by replacing a hydrogen atom with methyl, they altered its physiological action, changing it from a convulsive poison which would tetanise the spinal cord into one which would paralyse the motor nerves. This was the beginning of the new era in pharmacy when we shall be able to form compounds to have any action we please. It seems rather an extravagant idea, but things are tending that way; and Mr. Dott and Dr. Stockman are helping to hasten the time, as witness the papers read by them at the Conferences last year and this.

THE FLESH-HOOKS OF SCIENCE.

Dr. Lauder Brunton likens the action of drugs on the human body to the action of a man trying to transfix with a flesh-hook various pieces of meat in a pot. It was the custom of the sons of Eli when they were priests in Shiloh to send their servant with a flesh-hook having three prongs, which he struck into the pot of any man who was offering up a sacrifice, and all that the flesh-hook brought up the priest took for himself. Now it would depend on the contents of the pot and the kind of hook employed what the priest's man brought up. With the small pots they were likely to have in Shiloh it would not matter what kind of shank were used; but in larger pots it would matter very greatly, for with a short handle one would not reach the nice pieces lying in the middle of the pot, while with a long one the hooks would go plunging right through to the other side. Let us look at the action of the chlorides of sodium, potassium, and rubidium. Let the metal represent the shank, and the chlorine the hook. Sodium has the atomic weight 23, and is too short to reach the important parts to be got hold of; rubidium equals 85, and is therefore too long, going right through them without laying hold of any; while potassium equals 39, and is just the proper length. Now what do we find in reality? Why, that the chlorides of sodium and rubidium circulate in the blood without doing any harm, while chloride of potassium is a powerful muscular poison. This is attributed to the differences in the atomic weights. The periodic law, which states that elements with similar chemical and physical properties occur at regular intervals, will probably greatly assist in determining what bases to use for certain purposes, as it is not too much to suppose there will be a physiological connection between them as well.

ANOTHER CONTRAST.

Again, suppose the nature of the hook were changed, then you would get hold of different pieces of flesh, according as it was blunt or sharp. Let bromine or iodine replace the chlorine, and note the effect. The chlorides circulate in the blood without producing any ill effects, so far as the chlorine is concerned. Bromine, representing a sharper hook, acts on the blood and nerve-centres, *e.g.*, bromide of sodium is given in sea-sickness, and bromide of potassium as a sedative when the brain is excited. Iodine, representing a still sharper hook, tends to affect the muscles and glands, *e.g.*, iodide of potassium is prescribed in chronic rheumatism, and iodide of sodium in glandular swellings.

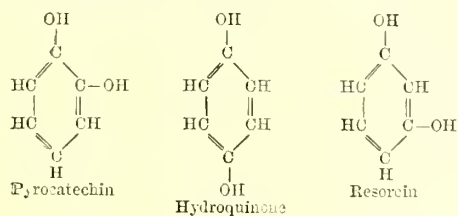
Mr. Coull then commented upon the action of the alcohols in the same way, and also discussed the carbon compounds formed on the principle of an open chain, and from this proceeded to speak of the physiological effect of

CHANGES OF CHEMICAL CONSTITUTION.

In phenol, commonly called carbolic acid, though it has no action on blue litmus, we have an extensively used and very good antiseptic. It is an alcohol formed from benzene by replacing one of the hydrogen atoms by hydroxyl. Well, when these hydrogen atoms in phenol are replaced by methyl the antiseptic power increases, and the increase is proportional to the number of methyl groups introduced. Dr. Lauder Brunton explains this increase in antiseptic powers by his analogy of the flesh-hooks. He says the hydrogen atoms in phenol are like short blunt prongs, and the methyl group is like a chain with a sharp point, which goes swinging through the pot and lays hold of everything, while the short blunt hydrogen atoms cannot reach all the lower forms of life.

THREE ANTISEPTICS.

There are three bodies which have a strong antiseptic action, but not equally powerful. They differ from phenol in having two hydrogen atoms in benzene replaced by hydroxyl; these are the isomeric bodies pyrocatechin, resorcin, and hydroquinone, of which resorcin has only one-third the strength of pyrocatechin and one-fourth that of hydroquinone. These bodies have all the same chemical composition, but not the same chemical constitution, differing from each other in the position of the hydroxyl groups, as shown in the following formulæ:—



The difference in antiseptic power is said to be due to their difference in constitution. These bodies, though good antiseptics, sometimes act in a way they are not intended to act, affecting the nervous system and circulation. This is attributed to their simple structure. Attempts to discover substances having a more specialised action, and having a similar but more complicated structure, led to the introduction of antipyrin, the best antipyretic we at present have.

After a passing reference to the German origin of synthetic products, Mr. Coull took up a subject which is popular with young pharmacists at present, viz.,

EXAMINATION SCHEDULES.

There has been for many years, he said, a standing grievance among men going up for the Minor examination. I refer to the delightful vagueness of the syllabus, and the frequent repetition of the words "et cetera." It is well known that the Minor examination is not a bit like what it was when the syllabus was framed. I think that any disadvantages of a complete syllabus would be more than counterbalanced by the good it would confer on men reading by themselves under our present regulations, especially in the country. It was no use to suppose our feeble wail would be paid attention to by the Council, but some consideration will no doubt be given to the weighty words of one of the honorary members of the Society.

The speaker then advocated the extension of the Preliminary examination, so as to include elementary mathematics, elementary mechanics, French, and German—spoke of the admission of professors for the assistance of the pharmaceutical examiners, and Mr. Wills's candidature for the Pharmaceutical Council, with special reference to the circular issued against him, and "the absurdity of the conduct of those gentlemen who blackball a man simply because he is the head of an educational establishment for pharmaceutical students." Provincial education also came in for comment, and, following that,

A FEW WORDS TO YOUNGER MEMBERS

were given. These were: To young men entering the trade I wish to say that they should not think anything they are asked to do is too lowering for them. A course of bottle washing, shop dusting, and scales polishing is quite as necessary for their future success as courses of chemistry, botany, and materia medica. It is usually the boy who makes his shop bottles and scales shine most brilliantly that gets on best in life. Attention to trifles and the cultivation of your natural powers of observation have been inculcated times and again. Observe, record, communicate. If Sir Isaac Newton had not *observed* the apple fall, we should not have had the law of universal gravitation. The same great physicist *observed* that substances with a high refractive index were all combustible. He noticed that the diamond has a high refractive index, and so predicted its combustibility years before it was actually shown to be combustible.

THE IMPORTANCE OF WRITING PAPERS.

We must remember that besides our private life we have all a public life to live and a public duty to perform towards our fellow-men. And by communicating our results in any subject, no matter how trifling, we are doing good to others by giving them the benefit of our experience. If it were not that there are found men among ourselves who find time and take the trouble to do that, I wonder what sort of book our standard work published "by authority" would be. I am afraid that many useful little details would be absent—details which ensure more desirable and perfect products. One illustration will do. A short note was read at one of our evening meetings some years ago, in which the author, Mr. Boa, advised the addition of a little tragacanth in the preparation of confectio sulphuris. Well, I have no doubt a great many who heard him did not think much attention would be paid to it. I confess I was among the number; but in the new edition of the Pharmacopoeia, under "confectio sulphuris," you will see that there is a certain proportion of tragacanth added in order to suspend the sulphur and cream of tartar.

In concluding, the President commented on the importance of experimentation, and gave some valuable advice thereanent. The address was listened to with wrapt attention, and the President was heartily applauded at its conclusion.

In moving a vote of thanks, Mr. JOHN WILSON, vice-president, remarked that he thought the introduction of mathematics as a subject in the preliminary examination would be a decided advantage to students.

Mr. WM. GILMOUR, F.R.S.E., in seconding the vote of thanks, said he had listened with much pleasure to Mr. Coull's interesting and racy address, and had especially enjoyed his humorous and apparently impromptu asides. The address bore evidence of careful thought, and contained many suggestions well worthy of consideration. With regard to examinations, he certainly thought it would be a decided advantage to all candidates to have a knowledge of mathematics. In his address in these rooms last year Professor Crum Brown pointed out the increasing importance of mathematics to the student of chemistry, and that alone should be an inducement for all who intended to follow the practice of pharmacy to acquire a knowledge of the subject. Mr. Coull had referred to one instance of a member of the association having made a useful suggestion which had been adopted in the national Pharmacopoeia, but there were also others. He noticed from the syllabus that they were to have a number of practical papers during the coming session, and he hoped they would continue to do good work. He was very much pleased to see so large and encouraging a meeting, and he would like to suggest to the younger men the desirability of coming to the front and filling up the vacancies which must from time to time occur through losing the older and more prominent members. The fact that this was the beginning of their eleventh session was itself significant, and he had great pleasure in wishing them prosperity and success.

The discussion was continued by Messrs. Carsewell, Duncan, Henry, Hill, Lunan, Macpherson, and Merson.

The Secretary then read the report of the Prize Committee on Mr. Crowden's prize for the best description, by an apprentice member, of the botanical excursions. Two essays, both of high merit, had been handed in, and the prize was

awarded to Mr. Thomas Conley, 36 Howe Street, to whom the President presented a copy of the British Pharmacopœia.

Mr. W. Taylor, secretary, was elected vice-president in room of Mr. J. Wilson, resigned; Mr. A. R. Bennett, assistant secretary, was elected in room of Mr. Taylor; Mr. G. F. Merson in room of Mr. Bennett; and Mr. Butchart, member of the committee, in room of Mr. Merson.

The Chairman having intimated that the next meeting would be a open one, under the charge of Mr. George Lunan, ex-president, the meeting closed.

The annual conversazione has been fixed for Friday, December 7, in the Literary Institute, South Clerk Street. The committee are arranging for an interesting exhibition during the first hour.

Trade Notes.

MESSRS. C. J. VAN HOUTEN & ZOON, cocoa manufacturers, of Weesp (Holland), have appointed Mr. Alexander Leckie, of St. George's House, Eastcheap, E.C., their agent for the United Kingdom.

IN our Melbourne Exhibition report the eau de quinine shown by Messrs. Wolff & Son, of Karlsruhe, Germany, was in error alluded to as a popular Continental tooth-wash; we should have said hair-wash.

MESSRS. VALENTINE ROBINSON & Co. sold at the Mart on Monday last a collection of shares in miscellaneous joint-stock companies not usually quoted. Among these were twenty shares in Batey & Co. (Limited), mineral-water manufacturers, of Kingsland Road, 3*l.* paid, which brought 3*l.* 2*s.* 6*d.*, 3*l.* 5*s.*, and 3*l.* 10*s.* Two hundred shares in Condy's White Lead Company (Limited) were also offered, but not sold.

MESSRS. HERTZ & COLLINGWOOD ask us to state that for some time past they have ceased to supply Jensen's cod-liver oil in original casks or in winchesters. The oil is now only obtainable in the four sizes of capsuled bottles put up by them, but they inform us that they find that chemists and others are being offered the oil in barrels by some persons unknown. Only this week they claim to have had two inquiries from large firms for Jensen's cod-liver oil in barrels, which in both cases they have declined to supply.

MR. FREDERIC R. CRESSWELL, the senior partner in the firm of Cresswell Brothers, of Nos. 1 and 2 Red Lion Square, London, W.C., has arrived at Aegina, Greece, the firm's principal establishment at the Mediterranean sponge fisheries. He is on his annual visit to the various islands of the Greek and Turkish Archipelagos, where Messrs. Cresswell Brothers have agencies and depots. The first parcels of the new fishery have arrived and are very good in quality. They are now on show at Messrs. Cresswell Brothers' London warehouses. There is no change in price. It is not known yet whether the season is a very good one; but fairly average results can be expected, judging from what the fishing vessels have already brought in.

ROWNTREE'S "ELECT" EXTRACT OF COCOA.—We have received from Messrs. H. J. Rowntree & Co., of the Cocoa Works, York, a sample tin of their "Elect" extract of cocoa, which they are now bringing before the public through the medium of chemists. The cocoa is in a powdered form, and we are enabled to state that it forms with the addition of boiling water, sugar, and milk, an excellent beverage, possessing the rich brown colour which is distinctive of pure cocoas manufactured from high-class beans, and of a very pleasant taste. We may add that we can fully confirm Messrs. Rowntree's claim that a small teaspoonful of the extract suffices to make a breakfast cup of the beverage. The cocoa is put up in neat yellow labelled 1*lb.* tins, which should form a handy article for sale by chemists, who are now gradually obtaining something like their fair share of the retail business in cocoa.

THIS is how it is done in America by some instrument makers:—"Physicians sending their patients to us to have trusses fitted, or for elastic hosiery, will please send letter of introduction, that they may be 'credited with the 25 per cent. discount allowed them.'"

Personalities.

MR. RICHARD HAWKES, pharmaceutical chemist, borough magistrate and town councillor of Stratford-on-Avon, is to be invited to accept the mayoralty of the Shakespearian borough for the forthcoming year in succession to Sir A. Hodgson, who has occupied the office for the past five years.

MR. L. CALLAWAY, formerly proprietor and manager of the dispensing branch of the General Apothecaries' Company at 276 Oxford Street, London, has purchased the business at the Victoria Road, Southsea, previously carried on by Mr. W. R. Fowler, of Portsea.

MR. TOOLE AND THE CHEMIST'S ASSISTANT.—"I received curious letters for orders," says the popular comedian in his "Reminiscences," "with curious reasons why I should send them. A chemist's assistant wrote for an order, his claim being that he had once prepared a prescription for me, and had made up the wrong medicine, fortunately without injury; and this had always made him follow up my career with the greatest interest."

MARRIAGES.

[*Notices of Marriages and Deaths are inserted free if sent with proper authentication.*]

ALLAN—FORGAN.—At 7 Douglas Street, Stirling, on October 24, by the Rev. Walter Scott, M.A., Henry Wemyss Fielding Allan, chemist and druggist, Kirkcaldy, to Bessie Blyth, eldest daughter of David Forgan, of Messrs. Sowdan & Forgan, music sellers, Stirling.

BEECHAM—BEASLEY.—At St. John's the Divine, Fairfield, Liverpool, on October 30, William Beecham, L.R.C.P., &c., of Bethune Road, Stoke Newington, London, youngest son of Thomas Beecham, of Mursley Hall, Winslow, Bucks, and St. Helen's, Lancashire, to Maud, eldest daughter of Thomas Beasley, of Fairfield.

PENBERTHY—MITCHELL.—At the parish church, Sidmouth, on October 21, by the Rev. H. G. J. Clements (vicar), Henry Broad Penberthy, chemist and druggist, Sidmouth, son of the late Mr. J. Penberthy, surgeon, of Redruth, Cornwall, to Edith, eldest daughter of the late Mr. W. M. Mitchell.

SCOTT—BRADFIELD.—At Trinity Cathedral, Shanghai, on September 12, by the Rev. H. C. Hodges, M.A., George David Scott, of Hongkong, elder son of George Gordon Scott, of Greenwich, and grandson of the late Admiral Scott, of Banff, to Marianne Susannah (Minnie), elder daughter of John Bradfield, of Shanghai, China.

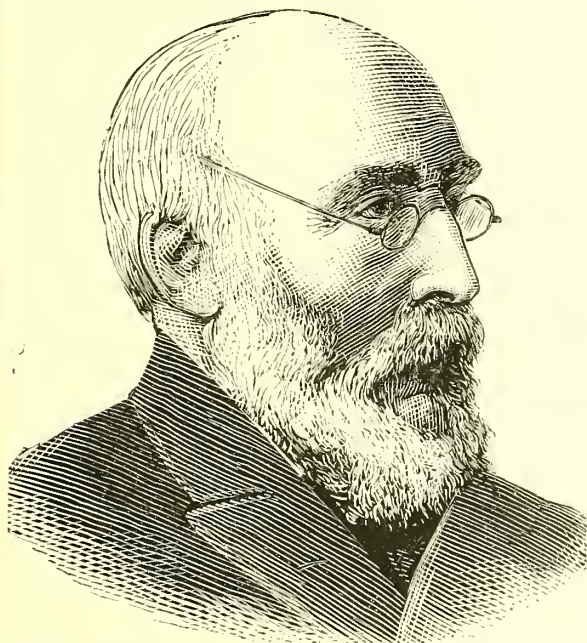
DEATHS.

BECKER.—The death is announced, at Daisymere, near Buxton, of Mr. John Leigh Becker, senior partner in the firm of Messrs. Hannibal Becker & Co., of Middleton Junction, near Oldham, and an active partner of the Middleton Junction Chemical Works. Aged 77.

GILLIATT.—On October 17, Mr. William Gilliatt, chemist and druggist, Wide Bargate, Boston. Aged 44.

WHITE.—On October 23 Mr. F. F. White, a gentleman who, though connected with Mincing Lane business for many years, had but recently attained some prominence among the frequenters of the Commercial Salerooms, died after a few days' illness. Mr. White, who only attained the age of 34 years, had from his youth been connected with the house of Messrs. David Taylor & Sons, American merchants, of 61 Mark Lane, E.C., and when last year that firm became financially embarrassed, he, together with a Mr. Ellis, commenced business in the same branch under the style of Ellis, White & Co. After the official settlement of the affairs of Messrs. David Taylor & Co., the former head of that firm also entered into the partnership of Messrs. Ellis & White, who then again reverted to the old style of the house. Mr. White through his genial personality contrived to make a wide circle of friends during the short period of his independent business career.

WYLEY.—We regret to announce the death of Mr. Francis Wyley, J.P. (the senior partner of Messrs. Wyleys & Co., Coventry), which took place at his residence there on Oct. 25. He was at his business on Tuesday, the 23rd, when he had a stroke of paralysis, and it was to that attack he succumbed. The deceased gentleman was born at High Onn House, near Stafford, on July 23, 1810, and was therefore 78 years of age. He was educated at Newport (Salop) school, and afterwards proceeded to Guy's Hospital, and, taking the degrees of M.R.C.S. and L.S.A., practised in Coventry some years as a surgeon. Then he joined his brother, Mr. John Wyley, in the business of wholesale chemists, and was senior member of the firm of Wyleys & Co. up to his death. But Mr. F. Wyley's activities were not confined to this business. He sat in the town council as a representative of Gosford Street



Ward for some years, and was subsequently elevated to the aldermanic bench. In November, 1860, he was unanimously elected mayor; and it was during his year of office that the distress was so great in the ribbon trade. The occasion was one demanding more than local effort to meet the poverty which afflicted the weavers and their families; and as the disaster to the weaving trade was due to a national policy, the Mayor made an appeal to the nation for funds. The result was the collection of the large sum of 53,000*l.*, of which her Majesty the Queen gave 100*l.*, and Mr. Wyley himself 50*l.* The deceased retired from the city council several years ago. He was chairman of directors of the Coventry Union Banking Company, having been elected on the board in the year 1842, and chairman of the Cotton Spinning Company; was hon. secretary of the Corn Exchange from the time of building until two years ago, first secretary of St. Michael's parochial schools, churchwarden of St. Michael's, towards the restoration of which he contributed 500*l.*, a director of the old Gas Company, chairman of the Elastic Company, income-tax commissioner, governor of King Henry VIII's School, trustee of the amalgamated charity schools, after occupying a similar position in relation to Bayley's Charity, trustee of Coventry Savings Bank, and treasurer to several local public authorities. In politics Mr. Wyley was a Conservative, and was one of the vice-presidents of the Coventry Conservative Association, taking a very active interest in the affairs of the party. The executive of that body have passed a vote of condolence with the family. Mr. Wyley was twice married, first to Miss P. Fitzthomas, the youngest daughter of the Rev. E. H. Fitzthomas, and, after her death, to a daughter of Thomas Sharpe, the antiquarian. By his first wife he leaves three sons and one daughter—Lieut. Frank Wyley, R.N., commanding H.M. ship *Racen*, Australian station; Mr. Arthur Wyley; Mr. James Henry Wyley, Stafford; and Mrs. Thomson, wife of Surgeon-General Thomson, stationed at Bombay.

HANDY BOOK OF MEDICINE-STAMP DUTY.

THE *Lancet* of last week has an editorial article based on Mr. Alpe's recent book, in which the medical journal returns to its oft-repeated advocacy of the repeal of the Medicine Stamp Acts. After complimenting Mr. Alpe on the excellence of his workmanship, and declaring that, "as a guide to what is and what is not comprised within the purview of these perplexing statutes, the work is calculated to be very useful to chemists and druggists and to others whom it concerns," the *Lancet* goes on to express the opinion that "its use will pass away with the repeal of the Acts which it expounds, and we cannot, even out of complacency with a well-wrought piece of work, desire or expect that this will be long deferred."

Some quotations are made from Mr. Alpe's history of the tax to show that perhaps at the time when it was introduced the necessity of obtaining funds justified it. But the *Lancet* proceeds:—"The necessity has long since passed away—the tax remains. The reason of its perpetuation is, no doubt, that no serious and well-directed effort has yet been made to procure its abolition. Modified it has been from time to time, according to the exigencies of the hour. Generally with a view of securing a better grip upon the taxpayer has the Legislature taken this problem in hand, and one after another these ingenious expedients have been devised which now inflict so serious a loss upon the public, and such grievous annoyance from time to time upon individuals. But the course of legislation has not been by any means uniformly in this direction. Thus in 1815 an exemption was made in favour of the vendors of confectionery, and in 1833 a similar advantage was secured by the dealers in mineral waters."

"The mischievous operation of this tax, which has led to its repeal in these instances, is by no means confined to the particular industries which have received relief. On the contrary, it is rooted in the nature of the tax itself, and affects, and must affect, any industry which is made to contribute. A cynic may, indeed, rejoin that, so far as the majority of proprietary medicines are concerned, it would be no public loss if they were affected to the point of being kept out of the market altogether. There would be much truth in the observation, for the indiscriminating administration of nostrums, on the faith of an advertising puff, is a most pernicious practice. But, unfortunately, the tax does not make such medicines unpopular. On the contrary, the Government stamp directly and powerfully conduces, among the more uninstructed classes of society, to a belief in the soundness of the medicament to which it is affixed. The duty does not come out of the manufacturer's or vendor's pocket, but out of his customer's; and the circumstance that he has to pay the duty in advance enables him to invest money which shall pay him the full return of his ordinary business profit without incurring the smallest risk or trouble in turning it to account. This is where the mischief creeps in. The public does not want medicine, as it does mineral waters, in bulk. The high price, therefore, to which it is driven up by the duty is not a matter of prime importance; but it is of great importance to the taxpayer that he is required for every 6*d.* that he pays in to the national exchequer to pay 1*s.* or 1*s.* 6*d.* to a number of intermediaries whom the method of collection adopted in this instance interposes between himself and the Revenue Department. This is an evil more serious even than the great hardship which arises to individuals who innocently offend in ignorance—an ignorance to which the habitual attitude of the Revenue authorities largely contributes, when these latter arouse themselves, as they occasionally do, and go forth seeking whom they may devour. The produce of this tax is so inconsiderable, having never reached in the gross so much as 200,000*l.*, that it might easily be provided for by some quite unobjectionable alternative when the Budget is being arranged, and we hope that those most directly interested will take care that this is brought prominently to the notice of the Government upon the first opportunity."

The following review (together with an editorial article based upon the topics suggested in the *Handy Book*) appeared in the *Pharmaceutical Journal* last week:—

This book, although not avowedly an official exposition of the Acts relating to medicine stamps, is put forward as the work of an official who has had long experience in the

department entrusted with the application of the law on this subject, and might therefore be expected by a purchaser to furnish trustworthy information, not only as to the actual statutes, but also as to the principles by which the department is guided in interpreting them. And we may say at once that the expectation would not be disappointed; for within the space of a hundred and forty pages may be found compacted more useful and trustworthy information as to the stamping of dutiable medicines than has ever before been available. The book commences with a brief, well written *résumé* of the history of the duty upon medicines, since its first imposition in the year 1783 [full reference to which is made in the editorial article]. This is succeeded by a codification of the existing statutes, or residues of statutes, interspersed with a lucid commentary, followed by the schedule appended to the Act of 1812, and interesting annotations upon some of the medicines included therein. The "General Charge of Duty" and "Special Exemptions" are made the subjects of special chapters, which contain, it may be fairly assumed, an exposition of the law in accordance with the views of the legal officers of the Inland Revenue Department. It seems as full and explicit as any general statement upon a rather intricate subject can well be, and if carefully consulted will settle many questions that would in the ordinary way be served up as intellectual exercises for an editor. One thing it demonstrates pretty clearly is that the officials do not arrive at their conclusions as to the liability of a label quite so arbitrarily as has sometimes been asserted; at the same time it is evident that they consider their first business to be the collection of a tax according to what they believe to be the law, and not the justification of any particular piece of legislation. Very possibly accident or "perverse ingenuity" may give rise to forms of labels that are not covered by this exposition, but doubts arising from such are not likely to be settled better than by direct application for an opinion to the Board. Ordinary mortals, however, will find in this book a better means of enabling them to keep within the limits of the law on this point than they ever possessed before. A number of magisterial decisions are quoted and in the appendix will be found a curious "Pharmacopœia Empirica," published in the *Gentleman's Magazine* in 1748, and a list of medicines that are or have been the subjects of letters patent.

BANKRUPTCY REPORTS.

Re J. B. LESLIE & Co., Trippet Lane, Sheffield, Chemists and Druggists.

ON October 25, at the Sheffield Bankruptcy Court, Mr. Arthur Neal applied on behalf of Joseph Blackburn Leslie, trading as above, for the order of discharge. The Official Receiver reported that the debtor had not kept a cash book as required by law, and that he had continued to trade after admitted knowledge of insolvency within two months of the filing of his petition. It appeared, however, that although no cash book was kept, other books enabled the debtor's position to be accurately ascertained, and the insolvency was due to the impossibility of realising mortgaged property. Mr. Neal urged that it was not a serious offence that a business forty-two years old should have been carried on for two months in the hope of improving the state of things. His Honour said there was nothing in the Official Receiver's report which affected the character of the debtor, and granted the discharge subject to a suspension of three months.

Re ARTHUR GEORGE RICKARBY, Clacton-on-Sea, Chemist.

AT the Colchester County Court, on October 22, an offer was made in this affair to pay to creditors 5s. in the pound composition, 2s. 6d. within two weeks of the date of approval, and 2s. 6d. six months later. This was accepted.

Re JOHN ILEY, Wolsingham, Durham, Chemist, &c.

THE first meeting of creditors concerned under this failure was held at the Three Tuns Hotel, Durham, on October 30, when the following statement of affairs was issued:—

Liabilities to unsecured creditors, 80*l.* 16*s.* 11*d.*; other liabilities, 889*l.* 11*s.* 1*d.*, expected to rank to the extent of 339*l.* 11*s.* 1*d.*; liabilities on bills other than debtor's own

acceptances, 170*l.*; preferential creditors, 595*l.*; gross liabilities, 1,457*l.* 8*s.* Assets: Stock-in-trade, estimated to produce 30*l.*; good book debts, 11*l.* 8*s.* 10*d.*; furniture, 35*l.*; total, 76*l.* 8*s.* 10*d.*; deficiency, 518*l.* 19*s.* 2*d.* The failure is attributed to bad trade and losses on account of his brother, a grocer at Shildon. The debtor having no offer to make, the winding up of the estate is left in the hands of the Official Receiver.

At the public examination, which was held on the same day at the Durham Bankruptcy Court, the debtor said he commenced business in 1866 without any capital. He was in partnership with his brother as chemist and tea dealer from 1866 to 1869. In 1871 he took 50*l.* when he went out of the business. He was under no liability now in respect of that partnership. He kept a day book and a journey book. He had no money in hand at the time of his filing his petition, and had delivered up all negotiable securities belonging to his estate. He suspended payment five months ago. His income had been 67*l.* a year, and he had expended 69*l.* a year. Only 80*l.* out of the 590*l.* were trade debts; 140*l.* was due to his father as arrears under an annuity. He first became aware of his insolvency six months ago, at the date of the failure of his brother, who was a grocer at Shildon. He had contracted debts since he became aware of his insolvency, but expected to be able to pay them out of his business. He has not within the last three years prepared any statement of his affairs, and had never taken stock.

The examination was adjourned.

Re JOHN REVILL CLONTING, Thetford, Norfolk, Surgeon and Apothecary.

THIS debtor applied for his discharge at the Norwich Bankruptcy Court on Wednesday before his Honour Judge Price. The Official Receiver (Mr. H. P. Gould) reported that the liabilities in this case were about 2,711*l.* 12*s.* 8*d.*, and the assets 450*l.* The bankrupt did not appear to have committed any misdemeanour under the Bankruptcy Act. Debtor had admitted at his public examination that it would have been possible for him to have ascertained from his books at any time his position. He kept an account of the cash received from patients, but no account showing what became of it, nor of his liabilities in respect of borrowed money or goods purchased on credit. The bankrupt continued to trade after knowing himself insolvent. He commenced business as a surgeon at Typeo, Essex, in July, 1873, without capital, and the next year by the means of a loan of 500*l.* from his father-in-law (Mr. Clark) purchased a practice at Thetford. From the first he was hampered for money, and his expenditure exceeded his income. Advances were from time to time made to him by Mr. Clark, who in 1881 paid off all his debts. At that time he was indebted to Mr. Clark to the extent of 1,100*l.* Towards the end of 1884 he was still further pressed for money, and borrowed 488*l.* from a Mr. Trampley. In the summer of 1886 he was again subjected to considerable pressure, being served with several writs, and he then looked out for a partner. Ultimately in the October of the same year a Mr. Harris was induced to pay him 250*l.* on account of a two-third share in the practice, on the condition that he was to be at liberty to dissolve the partnership at any time upon three months' notice. In the following December and January further writs were served upon the bankrupt, and on January 14 Mr. Harris gave notice to dissolve the partnership in accordance with the terms of the agreement. The same month executions were levied upon the bankrupt's effects. These he paid out by pawning some plate and a carriage. Other executions followed, and the bankrupt filed his petition.

Mr. Chollock, who appeared for the bankrupt, pointed out that no misdemeanour had been committed, and said a man could hardly be insolvent without having some offences reported against him. The offence alleged against this bankrupt was that he had traded after knowing himself to be insolvent, and that he did not keep proper books.

His Honour remarked that this was different from ordinary trading. A professional gentleman might be pardoned if, at the end of the year, his receipts did not quite equal his expenditure; but because of that he ought not to give up the pursuit of his profession, for perhaps at the end of the next year he would have a great accession of practice. There was no allegation that the defendant had lived extravagantly.

The Official Receiver said he did not make that charge, but there was a deficiency of over 2,000*l*. Bankrupt had only managed to wriggle along by sucking his father-in-law to the greatest extent, and when that source became dry he borrowed 480*l*. of a young fellow in London. At last he got hold of a partner, which kept him going for a couple of months. All the way through the bankrupt knew his position. When executions were in he pawned plate, and not until the Sheriff was going to sell did he file his petition. He contended that as a man of education he should have known he was going beyond reasonable bounds of the possibility of recovery. He suggested that the bankrupt should sign a judgment to pay a certain amount if he succeeded in his profession.

Mr. Chollock said neither the father-in-law nor Mr. Tramply had asked for their money, and he asked his Honour not to deprive the bankrupt of his energies by fixing on him the burden of a judgment.

His Honour said that in these matters he was ready to consider what would be the best thing for the creditors. But he thought if he hung about the bankrupt's neck a judgment it would tend to oppress him, so that he could hardly exercise his talents in the same way he could do if he were without a drawback. That would not apply to a tradesman who started again in business. He would not feel himself in the same irksome position as a man in a profession. Therefore he did not feel called upon to attach a penalty. But as bankrupt had been guilty of some offences, the case ought not to be passed over without some mark of disapproval by the Court. He would, therefore, suspend the discharge for two months.

Gazette.

PARTNERSHIP DISSOLVED.

White, R., R. J., & J. G., Cunard Street and Neate Street, Camberwell, Victory Place, Rodney Road, Walworth, Kingston-upon-Thames, and Barking (under the style of R. White and R. White & Sons, and Neate Street and Chumleigh Street, Camberwell, under the style of Artis, Capel & Co.), mineral water manufacturers; as far as regards R. White.

THE BANKRUPTCY ACT, 1883.

RECEIVING ORDERS.

Bradbury, David Addison, Lindley, Huddersfield, surgeon.

Mitcheson, Robert, Spennymoor, Durham, chemist and grocer.

FIRST MEETINGS AND PUBLIC EXAMINATIONS.

Bradbury, David Addison, Lindley, Huddersfield, surgeon—November 5, Messrs. Haigh & Sons, New Street, Huddersfield; November 19, County Court, Huddersfield.

Carter, William Henry, Hyson Green, Nottingham, hop-bitter manufacturer and bottler of and wholesale dealer in beer and stout—November 7, Official Receiver's offices, Nottingham; November 16, County Court House, Nottingham.

Chivers, Alfred (trading as the Eastmoor Chemical Company), Llanishen, near Cardiff, and Cardiff, manufacturing chemist—November 7, Official Receiver's office, Cardiff; November 6, Town Hall, Cardiff.

Colman, Walter Idwell, Brighton, surgeon—November 5, Official Receiver's offices, Brighton; November 8, Court House, Brighton.

Stewardson, Charles Vincent, Nottingham, mineral water manufacturer—November 2, Official Receiver's offices, Nottingham; November 16, County Court House, Nottingham.

ADJUDICATIONS.

Ney, John, Wolsingham, Durham, chemist and tea dealer.

Stewardson, Charles Vincent, Nottingham, mineral water manufacturer.

NOTICES OF DIVIDENDS.

Douglas, William, Chester, produce broker, and Furniss, Charles Strong, Tranmere, Cheshire, broker's salesman on commission. (lately trading as Furniss & Douglas at Liverpool)—first div. of 2½*d*. October 31, 4 Cook Street, Liverpool.

England, John, Higher Broughton, Salford, mineral water manufacturer—first and final div. of 3*s*. 3½*d*., October 30, Official Receiver's offices, Manchester.

Ferriani, Alessandro, Gower Street, doctor of medicine—First and final div. of 3*s*. 9*d*., November 5, and any subsequent Monday, 63 and 64 Chancery Lane, W.C.

ones, David Kent, Plasycod, Deri, Glamorganshire, surgeon—first

and final div. of 1*s*. 2½*d*., October 31, Official Receiver's office, Merthyr Tydfil.

Scott, Joseph, East Stonehouse and Plymouth, chemist and druggist—first and final div. of 1*s*. 3½*d*., November 12, Official Receiver's office, Plymouth.

Tobias, Alexander John, & Tobias, Henry Ashur (trading as Tobias & Co.), Liverpool, chemical brokers—second and final div. of 2*s*. 6½*d*., November 2, Official Receiver's office, Liverpool.

APPLICATION FOR DEBTOR'S DISCHARGE.

Hicks, Rivers (trading as Francois Le Mair & Rivers Hicks), Savage Gardens, Tower Hill, and Highbury Terrace, Islington, Indian and general merchant—November 23, High Court of Justice in Bankruptcy.

SCOTCH SEQUESTRATION.

Robertson, M., & Co., 84 Commercial Street, Dundee, oil merchants. Creditors will meet in Lamb's Hotel, Reform Street, Dundee, November 5, at 12 o'clock. James Gold, 41 Reform Street, Dundee, agent.

EXTRACTS FROM THE REGISTER OF DEEDS OF ARRANGEMENT.

The following deeds of arrangement with creditors have been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1887. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision, in the Act, making any of these arrangements binding upon dissenting creditors.

Dickson, Herbert Edward Balmain, 20 Balls Road, Birkenhead, and Ravensbourne, Rossett, medical practitioner. Trustees: F. R. Price, The Eastgate, Chester, accountant, and another. Date, October 24; filed, October 26; unsecured liabilities, 592*l*. 2*s*. 9*d*.; estimated net assets, 423*l*.

Arnold & Sons, London	4
Day, George, Chester	13
Dicksons (Limited), Chester	11
Smith, John, & Son, Chester	45
Brown & Holmes, Chester	14
Hamley, Madame, Chester	38
Hassall & Foulkes, Chester	21
Smith, J. W., & Sons, Leeds	27
Clay, Dod & Co., Liverpool	14
Roberts, R. S., Rossett	26
Lewis, Thomas, Rossett	11
Boydell, John, Rossett	35
Dutton, George, & Sons, Wrexham	23
Francis, J. B., Wrexham	12
National Provincial Bank, Wrexham	164
Jones, Rhys, Wrexham	15

Kirkham, Frederick William, Downham Market, M.D. Trustee: W. Pope, Downham Market. Composition of 10*s*. in the pound, by five instalments, 2*s*. 6*d*. January 14, 1889, and 2*s*. 6*d*. July 14, 1889, 2*s*. 6*d*. January 14, 1890, 1*s*. 3*d*. July 14, 1890, and 1*s*. 3*d*. February 14, 1891. Secured creditors, 370*l*. Date, October 24; filed, October 27; unsecured liabilities, 678*l*. 12*s*. 2*d*.; estimated net assets, 315*s*. 8*s*. 6*d*.

Jolly & Sons, Norfolk	4
Bulstrode, C., Cambridge	18
Swann & Son, Cambridge	143
Gale & Co., London	32
Mackay & Co., London	40
Krohne & Seeseman, London	28
Fergusson & Co., London	14
Robstio, Mr., London	13
Matthews Brothers, London	10
Stevenson, F. S., Lynn	15
Calver, H. W., Downham Market	25
Casey, Mrs.	47
Coulson, F. W.	15
Langman, W. B.	36
Bull, George	15
Bennett, W., jnn.	15
Pope & Son	16
Holme, J. C.	13
Prentice, Mrs.	11
Gurneys & Co., King's Lynn	270
Marsack, T., London	100

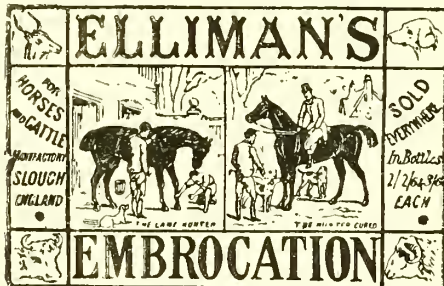
SECURUS JUDICATOR BIS TERRARUM

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"The Liquid Extract is quite free from the nauseous bitter taste of
Cascara, but it retains the undiminished aperient properties."

Chemist and Druggist

"Both preparations are free from that tendency to leave a persistent
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One pound bottles or W. Qts. through any Wholesale House or direct from
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GALEN WORKS, WILSON STREET, S.E.

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In bottles hermetically sealed, 2'6. Regularly stocked by Wholesale Houses.
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17/ PER CWT. CARRIAGE PAID to any railway station in England, 18/ in
24 and 50 lbs., 20/ in 7 and 14 lb. parcels; 1-lb. tins 5/ per doz. Best quality. No
Oil Extracted. Carefully cleaned and crushed so as to retain the natural colour of
the seed without being heated. Bags free.

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An APERIENT and
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For Adults and Children.

In the form of Eating Chocolate, which entirely disguises the taste of the Medicine.
It acts like magic on the liver, and imparts a permanent stimulus to the system.
Cures Headache, Indigestion, Biliousness, Fulness of the Head, Constipation,
Depression of Spirits, and General Languor.

The Sanativa Company are desirous of smoothing the path of physic-takers.
They have combined some laxative medicine with chocolate in a tempting manner,
and it is certainly not till after the dose has been perfectly absorbed that any
suspicion could arise in that infantile mind of the "plant" which has been worked
on him. The medication is certainly effective, either as a laxative or a purgative.
—*The Chemist and Druggist*, October 13, 1884.

Of all Chemists at 1s. 1d., or post free for 14 stamps from

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EDITORIAL NOTES.

THE IRISH PHARMACY BILL.

THE Irish Pharmacy Bill, drafted by the Council of the
Pharmaceutical Society of Ireland, revised by a Select Com-
mittee of the House of Lords, and formally agreed to by
the Peers generally, is put down for second reading in the
House of Commons on the 14th of the present month. There
is not much probability of the Bill getting even a hearing in
this supplementary session of Parliament, and if its opponents
show themselves to be vigorously in earnest it has no chance
whatever of passing. It is a bad Bill, unjust in principle,
impracticable in many of its details, and not calculated to
effect permanent good either to the Irish public or to Irish
pharmacists. Indeed, it really aims at very little besides
strengthening the Irish Pharmaceutical Society as a society.
Moreover, the high-handed manner in which its promoters
have endeavoured to carry it since they have secured the
favour of a few earls is not likely to encourage the sympathy
of outsiders.

We make these statements with much regret, and we feel
ourselves bound to justify them by a somewhat tedious
analysis of the proposed measure; to which, however, we
respectfully invite the attention of those interested and con-
cerned.

It must be borne in mind that the Bill originated in some
failures of the Pharmaceutical Society of Ireland to obtain
the convictions of certain persons who, it was considered,
were infringing the rights of licentiates of that Society under
the Act of 1875. The object of the Bill is, therefore,
primarily and essentially the restriction of trade. As such,
it demands the most careful scrutiny on the part of the
Legislature.

We advocate heartily the restriction of pharmaccutical
trade both in Ireland and Great Britain. Irish pharmacists
need not recede an inch from the vantage ground they have
already won; but they have no right to secure any advance
by means of injustice to others. This, we say, would be the
effect of their Bill, unless it should be mutilated in committee
to an unrecognisable degree.

In 1875 the Irish Pharmaceutical Council chose to confine their attention to "pharmaceutical chemists." They had the option, and that was their deliberate choice. They knew that "chemists and druggists" existed in Ireland, and they decided to officially ignore them. A dozen years afterwards they tried to persuade a court that the business of a chemist and druggist in Ireland was an illegal one. But this they failed to establish; and they have had to tacitly admit that the chemists and druggists in Ireland, whether in business before 1875 or starting since that date, have been earning their living in a perfectly honest manner.

If the Pharmaceutical Society of Ireland now desire to start on some new sort of career or to repair their former errors, all these persons styled chemists and druggists have more than a strictly legal right to the enjoyment of their honestly acquired position and property free from any vexatious interference. This principle is always recognised in such legislation. But it is a principle which has been widely departed from in the Bill sanctioned by the House of Lords. Its promoters, the Pharmaceutical Society of Ireland, after their defeat in the law courts, come to Parliament and demand that their victors shall be brought before them and subjected to various degrees of punishment. In the first place, all of them are to be degraded in title. It may be a small matter whether they shall be called "chemists and druggists" or "registered druggists," but no one can doubt that the purpose of thus officially describing men who have traded for ten, twenty, or thirty years as "chemists and druggists" henceforth as "registered druggists" is to insult and perhaps to injure them. Then those who have started in business since 1875, and who, be it remembered, had infringed no law in thus opening shops as chemists and druggists, are now to submit themselves to examinations controlled by their business rivals, by men who have already done their best to stamp them out. They are to pay for the pleasure of being thus examined, of course, and those of them who are graciously permitted to remain in rivalry are to contribute annually for their own tolerance to the funds of the Society which has been seeking to crush them. They will have no voice in regard to the disposal of the funds thus collected, and, for anything the Bill says to the contrary, the money may be spent by the Council to their direct disadvantage.

For the most brilliantly conceived insult of all, however, the promoters of the Bill are indebted to their allies in the House of Lords; but we do not hear that the former have made any protest against it. A clause was added by the Select Committee, providing that

Every person practising as a registered druggist under this Act shall display conspicuously outside his place of business a notice, in legible characters, as follows: "Not licensed to dispense or compound medical prescriptions;" and in default shall be liable to a penalty not exceeding one pound for every day during which such default shall continue.

What would British chemists and druggists think of a clause in some new medical Bill which should compel them to affix to their doorposts a notice declaring that they were neither competent nor permitted to offer any medical advice to any customers? What would the public say to a Bill which authorised Sir Charles Warren to brand in this style any person of whom he might have doubts as a suspicious character? And yet this is what these wonderful earls seem to consider a perfectly reasonable proposition in regard to pharmacists.

We want to know what is to be done with those druggists who do not manage to pass the examination proposed, or who are unable or unwilling to pay the fees demanded.

The Bill is so imperfectly drafted that it does not seem to establish any punishment for default in the annual fees. Of course it is intended that eviction shall follow. Would the Irish people amably permit the police to shut up the shop of one of their struggling neighbours, only just able, it may be, to make both ends meet, because he had failed to contribute to the Harcourt Street institution? We should think there may be among the Irish members of Parliament some who will see that eviction from a means of livelihood for non-payment of a fee to a Society pledged to the destruction of the victim would be at least as tyrannical an exercise of power as any recorded in the long story of the land struggles.

And then it is to be remembered that this Bill suggests no permanent provision for the future. As registered druggists fall out their places are not to be filled by others of the same class. They are only to keep the nests warm for future licentiates of the Society. But it has been proved that these licentiates will not bury themselves in little places in Ireland. What are the inhabitants of the small towns and villages to do? This is the question, if any, with which the Legislature ought to concern itself, but in the Bill it is left out in the cold altogether.

When did you ever get a favourable article from THE CHEMIST AND DRUGGIST? was asked at the recent annual meeting of the Irish Pharmaceutical Society. We might, in fact, point to many in the past twelve years, but this would be irrelevant now. More to the point in reply would be the more reasonable question, When did you ever get an unfair article from THE CHEMIST AND DRUGGIST? If we have shown that this Bill is unfair, Irish pharmaceutical chemists will not, we are sure, complain of our opposition. We do not suppose that any of them are consciously aiming at getting an unjust advantage; but in the constant contests of life it becomes impossible for interested persons to maintain a strictly impartial attitude, and associations of men often demand what individuals would not think of asking. This is probably the explanation of the genesis of this Bill; but, however that may be, we can assure Irish druggists that they have a good many sympathisers on this side of St. George's Channel. For ourselves, we have no preconceived prejudices on either side, and, moreover, our columns are open to any members of the Irish Society who are inclined to argue for their Bill. We shall be glad to have communications of such a character, so that British pharmacists who are unbiassed on this question may form their judgment with both sides before them.

CEYLON'S STAPLE PRODUCTS.

THE Ceylon mail received this week brings particulars regarding the exports from the island of its staple products during the commercial year 1887-8, which closed on September 30 last. A study of the meaning of these figures reveals some curious facts regarding the place occupied by this fertile island among the raisers of tropical produce. Cinnamon, coconut oil, plumbago, tea, and coffee are in bulk the main products of the country, tea being the only one among these which is of recent introduction. Ceylon plumbago was first introduced into commerce in 1829 by Mr. Joseph Dixon, of the American Crucible Company, and the industry created by this gentleman has been for years a source of considerable profit to the revenue of the island, in the shape of export duty. This tax at one time amounted to 2½ per cent. *ad valorem*, but it has been gradually reduced to its present rate, which, we believe, is 5 rs. per ton. But the diminution of the export duty has not been able to save the Ceylon plumbago industry from decay, and during recent

years large numbers of plumbago mines have been abandoned, and the value of the mineral has depreciated to such an extent that 15s. per cwt. will now buy a very fine quality. Nevertheless, the shipments of plumbago from Ceylon during the last two seasons have again shown a considerable increase, and in 1887-88 they reached 254,046 cwts., a total only once exceeded during the last decade. Coffee, once a mainstay of the Ceylon planters, has gone very much out of favour lately, owing, in the first place, to its tremendous fall in price; and from 842,509 cwts. in 1878-9 the shipments have fallen to 136,295 cwts. in 1887-8. The Ceylon people will, no doubt, regret to have participated so slightly in the great speculative movement of the last two years, but still it is scarcely likely that they will again resort to coffee-growing on any increased scale. Many of them have found salvation in tea, and, indeed, the soil of the island is generally so well adapted for the cultivation of all kinds of tropical produce that, if tea were to forsake them, the cultivators would have no great difficulty in wooing the favours of whatever new produce might be in the ascendant. Ten years ago Ceylon tea was scarcely more than a curiosity. In 1878-79 21,595 lbs. were exported from the island, and since then every succeeding season has outstripped its predecessor by bounds of from 30 to 70 per cent., until in 1886-7 the shipments exceeded 12,000,000 lbs., whence they rose in 1887-8 to 20,755,779 lbs., or about 10 per cent. of the whole of the tea imports of the United Kingdom. Nearly all the Ceylon tea is sent to the London market, and its average value last year was, roughly speaking, 1s. per lb., nearly 1,000,000*l.* having thus gone into the pockets of Ceylon planters from this "happy hit." Cocoa is also a new industry—in fact it is, as a commercial venture, even of more recent date than tea, for none was exported until 1879-80, when 122 cwts. were shipped. From that time the imports have increased to 12,611 cwts. last season, representing a value of, say, 50,000*l.* For this industry there is not so large a scope as for tea, and it is therefore probable that it will not develop to much larger proportions than it has assumed already, although Ceylon cocoa holds a very high rank among the different grades. In connection with these cultivations it may be interesting to state that while the consumption of tea in the United Kingdom increased from 122 lbs. per head in 1840 to 4.95 lbs. in 1887, that of cocoa rose during the same period from 0.08 lb. to 0.43 lb., while that of coffee receded from 1.08 to 0.81 lb. The cultivation of cinnamon is advancing more slowly than that of other staples, having grown from 12,192,208 lbs. in 1878-9 to 1,657,424 lbs. last season, in the face of constant retrogressions in price, which are now said to have become so acute as to leave scarcely any profit to the grower. The immense increase of the production of cassia lignea in China and further India and the cheapness of this coarser substitute have probably crippled beyond recovery the Ceylon cinnamon industry, which is known to have flourished in the island from as early a period as the thirteenth century, and was afterwards most assiduously protected by the Dutch colonists. The fruit of the cocoanut palm, and the products derived from it—copra, ponnac, and cocoanut oil—are shipped from Ceylon in enormous quantities, 385,758 cwts. of oil, which may have been worth about as many sovereigns, and 5,411,572 nuts having been sent abroad last season. The Ceylon product of greatest interest to druggists is of course cinchona. The surprising extension of its cultivation caused by visions of immense profits, the ensuing over-production, the rise of new competition farther east, and the impending decadence of the shipments have been watched and debated anxiously day by day, and many luckless speculators have been laid low by misplaced confidence in the article. Twelve years ago only 16,842 lbs. were exported; the

season of 1879-80 witnessed the shipments pass the million line, in 1883-4 the ten million mark was exceeded; and two seasons later the exports attained the unique figure of 15,364,953 lbs. Since then they have been declining, and in 1887-8, as we were able to inform our readers the day after the close of the season, they were smaller than at any time since the close of the 1833-4 season, viz., 11,704,932 lbs. What the coming season will bring it is impossible to say, but it seems quite likely that the production from other centres will be large enough to keep prices low, and in that case Ceylon planters will probably withdraw from this culture more and more. Cardamoms are another article of which the shipments have progressed in an extraordinary degree, and in value they now rank second among the minor cultures, the shipments of 310,685 lbs. in 1887-8 having probably been worth between 20,000*l.* and 30,000*l.*, while nine years ago they were so small as not to be worthy of separate record. Nearly half the Ceylon cardamoms are consumed in India and the Far East, the remainder being principally sent to Great Britain, though only a small proportion is actually used in this country. The two other "minor" articles which have risen from unrecorded obscurity since 1880 are oils of cinnamon and citronella. The shipments of both these oils last season are the heaviest on record. Citronella has been exported to the extent of 9,508,157 ozs., worth perhaps 35,000*l.*, against 1,760,677 ozs. in 1880-1, but the price, owing to this superabundant supply, has fallen from about 3½*d.* to ¾*d.* per oz. during the same time, and, if value alone is considered, the shipments in 1880-1 will therefore be found to approach last season's pretty closely. By far the largest part of this citronella oil is consumed in the United States, many of the popular toilet soaps made in that country being scented with it. Of cinnamon oil 144,433 ozs. were shipped from Ceylon last year, mostly to the United Kingdom, but a good deal also to the States. The value of this export cannot very well be determined, as most of the oil is known to consist simply of the low grade distillation product of the leaf, and not of the highly-priced bark oil. Large quantities of cinnamon oil are distilled in Europe from the cinnamon chips, which form a separate Ceylon export article. Among many other notable products of the island are coir and kitool fibres, deer horns, orchella weed, and ebony and Japan woods, but with the exception of the first they are all of minor importance. We should think that the Ceylon planters may find that in future they are more likely to reap profits from the cultivation of a number of comparatively small articles than from a few staples, and among the cultures to which they will probably turn their attention in the first place are cubebs, black pepper, nutmegs, cloves, annatto, vanilla, and other drugs and spices. As the climate of Ceylon is exceptionally suited for the acclimatisation of new products, and only a fraction (it is said less than one-ninth) of the island is at present under cultivation, the future of the ancient Taprobane is altogether beyond calculation.

THE COUNTY COURTS ACT, 1888.

THE original intention of the framers of this Act was to repeal twelve Acts affecting the County Courts and to re-enact the whole of the law relating to those courts (excepting as to the Admiralty jurisdiction thereof). This process has already been applied with advantage to other branches of the law, and if it could be carried into effect throughout the whole of the statute law, it would in great measure remove the reproach of the cumbrousness and difficulty of our law which, however, is the inevitable result of the manner in which that law is built up by successive amendments and explanations of the existing law on various subjects. In the

present case, if the original intention of the framers of the Act before us had been adhered to an abstract of the Act would not have been necessary here, as most business men may be presumed to be more or less acquainted with the present county court systems. But in consolidating the law, a few alterations have been introduced respecting which we may offer a little explanation.

With respect to the jurisdiction of the county courts, the principal additions are that after January 1, 1889, when the new Act will come into operation, actions for damages in respect of any malicious prosecution may be brought in the county courts as well as actions in which the validity of any devise, bequest, or limitation under a will or settlement may be disputed, both these classes of cases having been formerly excluded from their jurisdiction, as actions for libel or slander, for seduction and for breach of promise of marriage, are still excluded. Another indirect extension is in the case of actions commenced in the High Court of Justice and sent down to the county court, the limit of amount being now 100*l.*, instead of 50*l.* as formerly. The jurisdiction in actions of ejectment is enlarged to property of the annual value of 50*l.*, instead of 20*l.*, which was the former limit.

The mode and time of applying to have actions sent down to the county court from the High Court of Justice have been altered. By one of the old Acts the application could only be made after issue joined, thus necessitating the completion of the pleadings; and under another Act, the defendant must have applied within eight days after service of the writ of summons upon him. But now either party to the action may apply at any time. Under the first-mentioned Act the case was only sent down to the county court for trial, the result being reported to the High Court and judgment signed or entered there. But when the new Act comes into operation the result of removal will be to make the case a county court action to all intents and purpose. There is this peculiarity about the new power, that it will enable a plaintiff to do indirectly what he could not do directly, that is to say, by this circuitous method, he may bring an action (practically) in the county court, although the amount claimed may be considerably more than the amount to which the original jurisdiction of the county court is limited. Intending plaintiffs ought to bear this in mind, as it may be very useful in cases above 50*l.* where it is desired to try the action at a small expense. The writ may be issued and served, and on the following day application may be made to have the action sent down to the county court, which would generally be granted if there should be no special circumstances in the case, such as difficult points of law, &c.

The question of costs has an important bearing upon the selection of the court in which an action is to be commenced. Therefore intending litigants should remember that if they bring an action in the High Court which is founded upon contract, and in which the plaintiff shall recover less than 20*l.*, he will not (even if successful) be entitled to recover any costs of the action unless the judge direct that he shall have his costs. Between 20*l.* and 50*l.* would entitle him only to costs as if the action had been tried in the county court, if the action goes to trial, unless as above. But if the plaintiff in an action in the High Court should obtain summary judgment under the well-known rule in that behalf for 20*l.* or upwards, he would be entitled to costs upon the High Court scale. In actions founded upon tort (or wrong done), the corresponding figures to the above are 10*l.* and 20*l.*

One vexed question which has occasioned considerable difference of opinion among county court judges is disposed of by the express enactment that the right of a solicitor to address the court shall not be excluded by reason only that he is in the permanent and exclusive employment of any

other solicitor. In some courts the practice has long corresponded with what is now authorised by positive enactment. But in other courts the judges have held the right of a party to an action to be represented by a solicitor was limited to his own solicitor, and that such right could not be delegated to a clerk of his solicitor, even though such clerk were himself a solicitor and competent to appear for any party to an action who might retain him personally (and not his employer) as his solicitor in the action. Much inconvenience will be avoided by this enactment.

Default summonses will require notice of defence to be given within eight days instead of sixteen, as heretofore. This is an improvement, and makes the time correspond with that for entering an appearance to a writ of summons in the High Court.

The appointment of a deputy-judge is to be communicated to the Lord-Chancellor; and no deputy judge is to act for more than fourteen days at any time, unless with the approval of the Lord-Chancellor. The appointment of a deputy judge is not to be vacated by the death or resignation of the judge by whom he was appointed. Of course his appointment as deputy will cease when a new judge is appointed.

The powers of the registrars are increased to some extent; the most important alteration being that which gives to a registrar the power of deciding disputed actions, where the amount in dispute in the action does not exceed 2*l.* Although this may appear to be a small concession, it will considerably facilitate the dispatch of business. But this power is only to be exercised by leave of the judge, or in case of his death or unavoidable absence. The registrar will still have the powers which he now possesses for disposing of actions in which the defendant admits the correctness of the plaintiff's claim. In cases where the office of registrar may become vacant, and the plaints entered in the preceding year exceeded eight thousand, the Lord-Chancellor may make it a condition that the new registrar to be appointed shall not practise as a solicitor or a notary, but this is not to disqualify him for any public appointment. Generally in such cases it will be convenient for the office of district registrar of the High Court to be held by the person who is registrar of the county court.

Probably one of the next alterations in the law relating to county courts will be the extension of the direct jurisdiction of those courts to 100*l.*, but this will partly depend upon the working of the indirect jurisdiction to that extent given by the Act now under consideration.

Queer
Dispensing.

A correspondent of the *Medical Press* calls attention to the loose dispensing which is to be found in some provincial towns, and mentions that he knows cases where illiterate parties taken in as runners have become the dispensers to medical men, and are left in charge, except that the proprietor may look in daily for a few minutes to receive the proceeds of the "till or cash-box," as the case may be. He would like this sort of thing stopped, and the *Medical Press*, in replying to him, gives the following choice bit:—"Dispensing of medicine is carried out very loosely in certain districts. There is no one to prosecute an unqualified trader, except the Pharmaceutical Society, and they have very little money for the purpose, and have more-over to contend with an obscure law"—and so on.

* *

Vanilla
Growers'
Troubles.

A correspondence is now proceeding in the Mauritian journals on the serious depredations to which the vanilla plantations on the island are exposed. The fruit-bearing plants, when the pods begin to ripen, are torn off in hundreds by midnight marauders, who recommence their robberies every season, and pursue them apparently unchecked. The theft

have increased to such an extent this year that the planters protest that they will have to give up the growing of vanilla and turn their attention to crops less liable to theft unless stringent measures are taken to stop the nuisance; for not only do they lose a proportion of their crop so large as to nearly equal their margin of profit, but the thieves, who have to cure the stolen fruit hurriedly and secretly, are spoiling the reputation of the Mauritian vanilla by throwing quantities of ill-cured and imperfectly ripened beans upon the markets. The planters suggest that the Government should prohibit the transport of vanilla beans by night or without a pass, and they say that in the neighbouring island of Bourbon, where a similar measure was adopted, the thefts have almost entirely ceased.

Annatto Planting in Ceylon. In the last issue of the *Tropical Agriculturist* some particulars are given of annatto growing in Ceylon, and more especially on the Crystal Hill Estate, near the town of Matale, which appears to be the only plantation where the cultivation of annatto is followed on a systematic plan. Annatto seed from the Crystal Hill Estate is frequently met with in the London drug sales, and to the owner of the plantation, it appears, belongs the credit of planting up a comparatively extensive and valuable estate without a single tea, cinchona, or coffee bush. The chief feature is a continuous expanse of annatto, the handsome leaves of the big bushes, almost trees, contrasting with the bunches of rose-coloured flowers and still more with the reddish-brown heart-shaped fruit, so that away up the hillsides there is a show of colour perhaps never before equalled in Ceylon. The crop of bright red seed from the pods, which are opened by women and children in the field, is not a bulky one, nor is the value large in proportion to weight as compared with other and more popular products. There are at present 160 acres under annatto cultivation at Crystal Hill, but new fields are being actively prepared for the culture both there and on neighbouring plantations, so that we may expect a considerable increase in the exports from Ceylon, which in 1887 amounted to 39,144 lbs. of seed and 1,960 lbs. of "dye."

Specialities for an Emperor. It is not all controversial matter in Sir Morell Mackenzie's book on the dead emperor. In one passage he tells how for weeks after the tracheotomy innumerable letters recommending all sorts of remedies poured in from all parts of Europe, and also from America. A great variety of prepared foods, peptonised preparations, essence of beef, and zymised nutriment were brought under his notice. Cocoa pure and cocoa modified, peptonised and converted into an "elect extract," was enthusiastically recommended. Malt extracts under various names, and in combination with both meat and cocoa, were much vaunted, whilst friends in Scotland gravely assured him that if Highland whisky and oatmeal did not effect a cure, they would at any rate prolong life to its utmost limit. Mineral waters of every kind and from every place were sent in large quantities, and medicine of every description constantly reached the devoted physician. Medical practitioners in different parts of Europe were also good enough to advise particular remedies. From England calcined oyster shells had the most convincing vouchers; and, if human testimony is to be accepted, this remedy must have cured several cases of undoubted cancer. From France carbolic acid was the remedy most strongly urged upon Sir Morell, both as a local injection and as an internal remedy; whilst Dr. Bergeon's treatment was pressed upon him by several French physicians of eminence, who assured him that they had known cases exactly like that of the Crown Prince which had been cured by this method. The remedy most persistently recommended, however, was the quack medicine of Count Mattei, whose nostrums many persons in a high position of life most earnestly begged to be tried. Dr. Schrader received from Germany large quantities of similar advertisements, which were forwarded regularly to Berlin, in order that they might be placed in the State Archives of the Hausministerium. And so the recommendations continued to pour in, the surprising thing being how the physicians managed to dispose of the cartloads of stuff which were sent for the benefit of the royal patient.

LIVERPOOL CHEMISTS' ASSOCIATION.

REGULATIONS FOR SELLING AND DISPENSING POISONS.

AN adjourned meeting of the members of this Association was held at the Royal Institution, Liverpool, on Thursday afternoon, for the purpose of discussing the desirability of adopting regulations for keeping, selling, and dispensing poisons. Mr. A. H. Samuel, F.C.S., occupied the chair, and the meeting was a good representative one.

The CHAIRMAN, in opening the proceedings, said all chemists in that city, and all other cities throughout England, he presumed, had some regulations of their own for the safe keeping of poisons, but it was felt by certain representative gentlemen—among them Dr. Symes and other members of the Pharmaceutical Society of London—that it would be well if the Council of that Society were to submit to the Privy Council regulations for keeping and dispensing poisons, which regulations should in that case be adopted by the whole of the chemists. The point of difference, he apprehended, was that many chemists thought they could regulate this matter after their old-fashioned way, and they did not like what they called being dictated to by the Pharmaceutical Society. This was an open question, and he had no doubt they should have the views of gentlemen on both sides. He might say that the fact that carbolic acid had recently caused a number of deaths in Liverpool should make it the more necessary that they should pay attention to this matter. Although that question was not immediately connected with the one they had to discuss that day, still it bore upon it indirectly, and it might be necessary that they should recommend that that acid should be added to the list of poisons already scheduled, and sold by chemists and druggists.

Dr. SYMES said his wish was really to hear the views of the chemists on the subject rather than to express his own views; but it might be convenient that he should say a few words as to why he accepted the responsibility of bringing forward a matter of this kind, affecting the whole 13,000 chemists of Great Britain. He had to answer the Pharmaceutical Council next week in London, and it might not be necessary to make such an elaborate statement now as he would have to do then to maintain his position. The Pharmacy Act which regulated the conditions under which the chemist carried on his business was passed exactly twenty years ago—in 1868. In fact, they had two Acts, and in these, as well as in Bills which it had been attempted to pass, the first provision had been for the protection of the public, and certain regulations were laid down regarding the qualifications which the chemist should possess, and the way in which he should carry on his business and dispense poisons, all for the safety of the public. The first clause of the Act defined the nature of the qualifications required. The person who kept open a shop must be a pharmaceutical chemist or chemist and druggist, and two conditions were provided on which he should carry on and keep open a shop for the supplying of poisons. The first condition was that he should be registered under the Act, and the second was that he should conform to such regulations as to the keeping, dispensing, and selling of such poisons as might from time to time be indicated by the Pharmaceutical Society with the consent of the Privy Council. He read this because it was clear that the Act contemplated regulations to be formulated by the Society for the keeping, dispensing, and selling of poisons. Previous to the passing of this Act there had been a controversy going on amongst chemists and druggists as to a common basis which should consolidate the whole body and which would be acceptable to the Government. He remembered that in 1865 there were negotiations, and these were brought into a more or less concrete form in 1868, when the two parties reconciled their differences. The Government did not consider so much the question of qualification, although it recommended it, as regulations and restrictions in selling poisons. As early as 1819 the chemists in London met in a tavern in Fleet Street to consider a Bill then brought forward with a view to regulate the sale of poisons. This showed that the tendency had always been towards regulations. When the chemists had settled their differences they had still to settle with the Govern-

ment in the matter. In the discussion in the Houses of Parliament over the Bill their representatives admitted the necessity for these regulations, and it was only a question whether the Government in committee should formulate the conditions themselves, and bind the chemists to some particular bottle, or enact that a particular part of the shop should be kept apart for poisons, as in France and Germany; or whether the chemists should be trusted to formulate the regulations themselves and submit them to the Privy Council to be passed into law. It was never a question whether they should be made law, but as to who should draw them up. Mr. Lowe said he would not trust the chemists, and that it would be unwise to do so, and he voted against every clause in the Bill; but on the assurance of the members of the Pharmaceutical Council that the regulations would be made and carried out, also on the assurance of members of Parliament, the Bill was allowed to pass and become law. Then a number of chemists were put down for illegal trading. There was a great deal of pressure put upon the Society to prosecute everybody who was not registered and who sold poisons, but it was the opinion of the Council that they ought to moderate their proceedings. At the end of eighteen months, finding that no regulations had been made or submitted, the Council set to make such regulations, and they desired to make them as broad as possible, so that they would be adapted to the West-end as well as the East-end of London, and to agricultural and other districts. Dr. Symes then read the regulations which had been drawn up, quoting them from an article in *THE CHEMIST AND DRUGGIST* (October 13, page 513). According to these each poison should be kept in a box, bottle, vessel, or package, and distinctly labelled with the name of the article and the word "Poison"; these poison bottles should be kept apart from other bottles, or if not so kept they should be distinguished by touch, as, say, angular or fluted bottles. Thirdly, that they should be tied over, capped, and secured in a manner distinguishable from other bottles and vessels not containing poisons. Then as to selling poisons, they should be sent out with distinctive labels with the word "Poison." At that particular time these regulations were broad enough to cover the whole ground, and no one took exception to them, except those who said they were too broad and opposed them on that ground. But the basis of the opposition to them—which was very powerful—was on the ground that it was sought to make these regulations compulsory. It was stated that eight out of ten chemists observed these regulations voluntarily, and it would be hard on them to make them compulsory. But it was all the more desirable that the two-tenths should be made to observe them. At a large meeting held in London, where the regulations were submitted for confirmation, the opposition was so strong that two-thirds were against having them made compulsory. Ultimately they were accepted as recommendations. But the Privy Council could not make recommendations into law, and there the matter stood. Subsequently the medical officer of the Privy Council pressed the matter more strongly, and in 1871 the Government introduced a Bill containing clauses in which they took the initiative, but at the end of the session that Bill was crowded out. In 1885 the Government introduced a Bill to regulate the sale of poisons, and the particular feature of that Bill was that, instead of allowing the Pharmaceutical Society to take the initiative in the carrying out of the regulations, it was left in the hands of the Privy Council, who had treated the chemists as men who had not carried out their part of the bargain, and had not dealt quite fairly and above-board. That was to say, they had repudiated a certain portion of the bargain they had made. These compulsory regulations would be absolutely an advantage instead of a disadvantage to the trade, and he believed the chemists of the country would now largely support them.

Mr. B. DICKINS agreed that restrictions should be placed upon them in keeping poisons. Not only for the public safety, but in their own interests, dangerous articles should be kept separate. Mistakes had been made even by experienced men. If they had a compulsory law it would strengthen their hands in selling poisons to the public. He moved—

That in the opinion of this meeting it is desirable that regulations be made by the Council of the Pharmaceutical Society for keeping, selling, and dispensing poisons, with a view to submitting the same to the Privy Council, so as to become law.

The motion was seconded by Mr. J. HOCKEN. He had had for years a poison cupboard, and he found great advantage from it; and if these regulations were made compulsory they should probably find themselves in a better position.

Mr. J. J. SMITH supported the motion, and said he did not see what hardship there would be in making the regulations compulsory.

Mr. F. G. MACKINLAY said he felt strongly on this point. They had only just escaped a Poison Bill, and if they did not look after this matter themselves they should have it looked after for them. He quite agreed that these regulations should have been made years ago. It was high time they should take more care, for the sake of others.

Mr. DAY also thought the regulations would be to their advantage, and he should not be afraid of them.

Mr. W. R. SMITH said he was opposed to the regulations once, but from what Dr. Symes said he would have great pleasure in supporting them.

Mr. ARIS made a similar statement.

In reply to a question from Mr. Day, Dr. SYMES said these regulations would not affect medical men who dispensed their own drugs, and some of them, especially in Glasgow, kept shops for the sale and dispensing of poisons; but if chemists and druggists were under legal obligations, and medical men not, the public would be more likely to go to the chemist than to the shop of the medical man, who was not under such obligations. He was quite sure the chemists would lose nothing by it.

The resolution was then put to the meeting, and it was carried unanimously. On the motion of Mr. Hocken, seconded by Mr. Bain, secretary, it was resolved to petition the Privy Council to place carbolic acid in the secondary list of the scheduled poisons, and this terminated the business of the meeting.

A MEDICINE CHEST FOR THE TROPICS.

MESSERS. BURROUGHS, WELLCOME & CO. have just fitted up for the German Expedition for the relief of Emin Pasha a very complete medicine-chest, containing all medical and surgical requisites for two years' travel. The chest is the one made by the firm which is known as the "Congo," being similar to those supplied to Mr. H. M. Stanley, which we figured in our issue for January 27 last year. Certain important improvements have, however, been effected, more especially the exclusion of the teak-wood lining, whereby more space is secured, and the substitution of screw-capped metal vessels, in place of glass bottles, for all solid substances. The chest measures about 14 inches by 9 inches by 8 inches, and is made of thin but strong iron plate; the lid is boxed, and is used for holding the surgical appliances and external remedies which it is undesirable to have placed with those which are to be used internally. As giving an idea of what are considered desiderata for the treatment of disease in tropical regions, we mention the contents of the chest. In the form of tablets there are:—Antipyrin, 5 grs.; arsenious acid, 1/50 gr.; bismuth subnitrate, 5 grs.; bisulphate of quinine, 5 grs.; calomel, 1 gr.; cathartic compound, 5 grs.; chloral hydrate, 5 grs.; chlorate of potash, 5 grs.; iodoform powder; powdered ipecac, 5 grs.; lead and opium, 5 grs.; Livingstone's rousers; opium, 1 gr.; potassium bromide, 5 grs.; potassium iodide, 5 grs.; potash permanganate, 1 gr.; quinine, iron, arsenic, and strychnine; rhubarb and soda rhubarb (compound); saccharin, 1/2 gr.; sodium bicarbonate, 5 grs.; sodium salicylate, 3 grs.; trinitrine comp. (*nitro-glycerine co.*); Warburg's tincture, 1/2 drachm; and zinc sulphate, 1 gr.

These are packed in metal bottles of about 6-oz. capacity, and not less than 500 doses of each medicine are given, but of those that are required to combat malarial disorders—such as quinine and Warburg's tincture—about 2,000 doses are given. The Warburg's tincture tablets represent over 120 oz. of liquid, that is, nearly the entire capacity of the chest; yet the bottle containing the tablets is only one of several dozen which are in the chest.

All liquids are packed in square white flint glass bottles, each bottle fitting into a metal case. The following are the liquids:—Castor oil, chlorodyne, dialysed iron, valoid fluid extract of ergot, essence of camphor, eucalyptine (oil of euca-

lyptus globulus), ginger valoid fluid extract, hazeline (volatile principles of hamamelis), sulphuric ether, and turpentine. For external use: Blistering fluid, carbolic acid, chloroform, corrosive sublimate in powder, nitrate of silver, strong solution of ammonia, tincture of iodine, and oxide of zinc are supplied; and the other contents of the chest are:—Epsom salts, linseed meal, a case containing twelve different hypodermic kinds of tabloids with syringe, lanoline (Liebreich), mercurial ointment; isinglass, mustard, and sticking plasters; bandages, bistoury, caustic-holder, clinical thermometer, needles, oiled silk, scissors, and silk ligature.

The chest containing the whole of these remedies weighs less than 40 lbs., so that it can be carried by a boy bearer.

THE HOP-BITTERS COMPANY (LIMITED).

THE report of this company, including the profit and loss account from October 1, 1887, to September 30, 1888, has been issued to the shareholders. The accounts published are the following:—

Profit and Loss Account.

Dr.	£	s.	d.	£	s.	d.
To balance from trading account	4,078	13	8			
Auditor's fees	26	5	0			
Salaries	1,536	13	4			
Travelling expenses (managing director)	214	7	6			
Petty expenses	137	1	7			
Rent, rates, and taxes	596	13	0			
Law charges	1,812	6	5			
Directors' fees	250	0	1			
Debiture interest	150	0	0			
	£10,152	5	7			
Cr.	£	s.	d.	£	s.	d.
By balance at credit of this account on October 1, 1887	3,755	19	7			
Less dividend paid October 11, 1887	3,267	15	7			
				433	4	0
Interest				13	6	2
Transfer fees				25	12	6
Balance (carried to balance-sheet)				9,620	2	11
				£10,152	5	7

Balance-sheet, September 30, 1888.

Dr.	£	s.	d.	£	s.	d.
To capital—70,000 shares of 1l. each	70,000	0	0			
Less calls unpaid	1,359	7	6			
				68,640	12	6
Debentures, 6 per cent.				25,000	0	0
Sundry creditors				2,237	13	7
				£95,878	11	1
Cr.	£	s.	d.	£	s.	d.
By cash at bankers and in hand	297	12	2			
Sundry debtors	678	3	4			
Stock in hand	939	16	10			
Fixtures, furniture, &c.	403	14	8			
Trade-mark, goodwill, &c.	83,482	1	2			
Preliminary expenses	457	0	0			
Profit and loss	9,620	2	11			
	£95,878	11	1			

In their report the directors express their regret at the very unsatisfactory result of the year's trading, a result which they had certainly no reason to anticipate at the last general meeting, when the condition of the company was satisfactory and its future appeared prosperous.

The falling off in the sales is undoubtedly attributable, they consider, to the cessation of advertising on an adequate scale in consequence of the exhaustion of the working capital, which, small as it was from the commencement, became greatly reduced by the unforeseen expenditure incurred in the assertion of their trade rights against fraudulent infringements, and also by the failure on the part of certain shareholders to pay up their calls. The heavy cost of salaries, payable under the terms of contract with the vendor, further proved a heavy tax upon the resources of the company.

Since closing their balance-sheet the directors have succeeded in obtaining payment of nearly the full amount of

the unpaid calls on shares, and they have further been able to reduce the expenses of administration by the sum of 1,500l. a year, firstly by waiving their own claim to fees during the non-payment of a dividend, and secondly by the retirement of the late managing director, whose duties are now efficiently performed by the factory manager, without additional charge.

The costly law proceedings forced upon the board by the necessity of suppressing the traffic in spurious imitations happily resulted in a complete success, all the defendants in pending or threatened actions having submitted to a perpetual injunction. This traffic, so fatal to the interests of the company, being now virtually stamped out, no further outlay under this head is to be anticipated.

In order to obtain fresh capital they now invite subscriptions for 10,000 8 per cent. preference shares. They estimate that the economies introduced will more than cover the 8 per cent., and in justification of their proposal they say they are convinced that the popularity of the preparation remains unimpaired, and that it only requires to be kept under notice by means of advertising to restore the demand to its former proportions and to place the company on a sound and solid basis as a dividend-paying concern.

PHARMACY ON BOARD THE CHANNEL FLEET.

(From a Liverpool Correspondent.)

THE Channel Fleet paid a visit to Liverpool during the past week, and your correspondent honoured the fleet with his inspection. The *Iron Duke*, one of the oldest, dirtiest, and most useless ships of the fleet, was reached first. After examining the guns until I was satisfied that they were perfectly harmless, and looking at the cutlasses until I found that they would act as substitutes for footballs, I inquired the way to the drug department. The words "drug department" were evidently new to the mariner. Every place and corner on board one of Her Majesty's war-ships has a name, but there is a glorious indefiniteness about the drug department which is only equalled by the obscurity of the action of some of the drugs. Guided by the naval warrior bold, I found myself at last in that portion of the *Iron Duke* which is entitled "The Hospital." The "Hospital" is a cabin about 20 feet by 12; it is scrupulously clean, and compared with the other cabins in the man-of-war gives an impression of exaggerated airiness. The "Hospital" is supplied with four beds, and no less than three doctors are considered necessary to attend to the patients. These doctors, my guide informed me, always charged on the patients in triangles; they believed in the strength of union, and never visited separately. The sailor was of opinion that the doctors connected with the Channel Fleet had little work to do, and consequently executed little damage. The drug department in each "man" of the Channel Fleet is not a thing of superlative beauty, nor yet an everlasting joy. I may say that I at least expected a small room devoted to the preparation of prescriptions, but no. One side of the "Hospital," the 12-foot end, has a few shelves running along it, and a few bottles on them. The quantity of soda tart. I noticed to be about 3 oz.—the bottle when filled would only contain about 10 oz. In short, the whole stock of drugs on board one of the vessels of her Majesty's Channel Fleet is about sufficient to physic one good healthy invalid for about a week.

I inquired from the man, "Who does the dispensing?" and explained, as I noticed a vacuous look, what I meant by "dispensing." The man seemed to think that the attachment of any importance to making up physic was a burst of maniacal humour on my part, so he clutched a boarding-spike as a preliminary to replying that the steward and his two assistants performed those operations. "Of course," said the naval one, "the doctors tell them what to put in the bottles." I understood. Stewards on board Her Majesty's Channel Fleet also perform the duties of hospital nurses.

The position of a pharmacist on board one of Her Majesty's men-of-war would be extremely isolated. He would, of course, be averse to mixing with the men or the petty officers; and the other officers, for whose society his education would qualify him, would probably consider him an interloper at their mess.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., November 1.

BUSINESS has moved in a somewhat restricted circle since our last report, but notwithstanding the momentary quietness of the market generally, a good many drugs and chemicals are again quoted dearer, and only a few have actually lost in value. Two of the most important chemicals, viz. quinine and morphia, are decidedly firmer, although the advance in the former may probably prove transitory. Gallic and tannic acids may not unlikely be influenced by the news regarding China galls which we print below; cocaine is steady, and there is a little more demand for citric acid. Bromide of potassium does not appear to have actually altered in value. Heavy chemicals are mostly firm, and may be expected to further improve as we approach the end of the year. Sulphate of ammonia and nitrate of soda are actually dearer, and soda crystals are so scarce as to be almost nominal in value. In the department of crude drugs we have to report higher values for guarana, golden seal, root, chamomiles, Sumatra gum benjamin, Jamaica honey, Persian opium, cardamoms, belladonna leaves, Curaçao aloes, Tinnevely senna, saffron, serpentaria, and essential oils of clove and lavender (French); while cantharides, ergot, star-anise, cascara sagrada, calumba, Cape aloes, and rhubarb bring full prices. Vanilla is also a little dearer. As a set-off against these improvements, we can only say that crude camphor, though there is no change in the quotations, would probably be difficult of sale at the recent value. Among drysalteries, the most important event is the strong advance in shellac, which appears to be progressing rather too quickly, perhaps. China galls are also dearer; but gambier, although the quotations are above last week's, has fallen in value since Tuesday. Indigo, palm oil, and Zanzibar cloves are firm or better. Isinglass, on the other hand, is irregular, but generally cheaper; and all spices, with the exception of cloves, are easier, especially pepper, pimento, chillies, and Cochín ginger. Among the heavy oils, petroleum, rape oil, and linseed oil are less firm.

IT HAS LONG BEEN RUMOURED that the London Produce Clearing House contemplated extending its operations to shellac, tea, and other articles in addition to coffee, now its only "counter." So far as shellac is concerned, the reports have lately been very definite, but upon inquiry at the Clearing House office, we were informed by the manager that he "had not heard anything about it, although it might have been discussed;" an enigmatic answer, which looks so much like an official denial as to almost amount, perhaps, to a confirmation.

QUININE FOR THE MILLION.—It appears that a well-known London quinine operator is now trying to popularise quinine among the natives of India, Burmah, &c., by offering to supply "direct to the consumer" 4-grain quinine pills in boxes of two each, twelve boxes done up in a larger packet, at 1s. for the twenty-four, which is equivalent to 4s. 6d. per oz. Buyers who order 1,600 small boxes, or about 30 oz. quinine, in one order, will receive the goods carriage paid to any part of India. Each packet is accompanied by an illustrated pamphlet of sixteen pages, giving information in Marathi, Tamil, Gujarati, Bengali, and Hindustani, with pictures of various public buildings in England to "catch the native eye." Particular attention is called to the fact that the pills are "made by machinery."

THE AUDIENCE at the drysaltery auctions has largely increased in numbers since the commencement of the advance

in shellac and other articles usually offered at those sales. Besides being more numerous, it has likewise become decidedly more demonstrative, with an occasional approach to boisterousness. The general good humour at the improving position of the markets vents itself principally in loud and prolonged cries of "Oh! oh!" in an accent of feigned surprise, whenever a lot sells at a high rate. Even the personal idiosyncrasies of the selling brokers do not escape mimicry, and one of these gentlemen, who rejoices in a particularly piping, corkscrew kind of organ, is regularly made a butt for good-natured chaff, which, it must be said, he has learnt to take in the same jovial manner.

ACIDS.—*Citric* has been very dull throughout the week, but to-day an effort is being made to impart some life to the article, and buyers are said to be in the market at 1s. 5½d. per lb. *Oxalic* quiet, at 4d. per lb. *Tartaric* neglected, say at 1s. 4½d. for foreign and 1s. 4½d. for British brands. *Gallie* and *Tannic* may not improbably advance further in response to the improved position of galls in China.

ALOES.—*Cape* aloes are plentiful, and at to-day's auctions about 70 cases were sold at steady rates, but without quotable advance. Good bright hard, at 20s. 6d.; slightly drossy, 19s. to 20s.; ordinary, soft and drossy, 17s. 6d. down to 10s. per cwt. For one fine lot 21s. 6d. was refused, and a case of Natal, hepatic mixed, sold at 22s. per cwt. *Curaçao* aloes are still offering in undiminished quantities, but at to-day's auctions a fair proportion of ordinary dark and over-heated lots was cleared at 17s. to 25s. per cwt. Good "Capey" *Curaçao*s brought 30s. to 31s.; fair red liver, 45s. to 48s.; and one small lot of really fine aloes in gourds, 7l. per cwt. Of *East Indian* aloes, 9 boxes fairly good red Zanzibar sold at 5l. 10s. to 5l. 12s. 6d.; a large parcel of dark to brown softish socotrine in kegs, 92s. 6d. to 5l. 5s.; and 10 cases very common, at 7s. per cwt.

AMBERGRIS.—Fine qualities are still very scarce. A small piece of good grey amber, weighing only 1½ oz., sold at 90s. per oz. to-day. Dark and inferior lots are offering at 40s., and even less.

AMMONIA SALTS.—*Carbonate* remains dull at 3½d. per lb. net. *Salammoniac* sells steadily at 34s. and 32s. for firsts and seconds respectively. *Sulphate* closes rather quieter, but at an advance as compared with last week; 24 per cent. grey, and Beekton terms, at 12l. 5s.; Hull, 12l. 2s. 6d.; and Leith, 12l. per ton.

ANISE.—*Russian* is being offered more plentifully, but the most important holders continue to stand out for better prices. *Italian* and *Spanish* anise is also tightly held. *China Star anise* is not offering here at present, and cablegrams from Hong Kong describe the market there as very animated, a good demand prevailing.

ANNATTO.—A little firmer. Some fairly good Brazilian *Roll annatto* was offered, and sold at 1s. per lb., and for a parcel of *East Indian Seeds* 3½d. per lb.—rather a good price—was paid.

ANTIMONY, still tending dearer; up to 44l. per ton is asked for regulus.

ARSENIC steady, at 12s. 6d. per cwt. for white powder.

BALSAMS.—*Canada* is firmly held, and would appear not unlikely to advance further, the general tendency of American produce pointing in that direction, and stocks being reported scarce everywhere. Of *Copaiba* several small consignments have been received since last week, and although the holders are firm they can scarcely do more than keep the quotations stationary. At to-day's auctions 20 cases thick Maracaibo were bought in at 2s. 4d. per lb. nominally. *Peruvian* steady, up to 4s. 6d. per lb. being asked.

BELLADONNA LEAVES are quoted at higher rates.

BROMIDE OF POTASSIUM.—A circular was issued this week quoting the price at a very reduced figure, and causing a good deal of comment, but upon inquiry we are informed that the price given in the circular is not correct, the true quotations ranging from 1s. 5½d. to 1s. 6½d.

BUCHU.—There is no improvement in the demand, even at the exceptionally low prices which are now quoted. Fairly

good long leaves may be had at 6*d.* per lb., and round at from 1½*d.* to 2*d.* per lb.

CALUMBA keeps very firm at the late improvement in value. Fifty-one bales were disposed of to-day at 25*s.* for washed but rather dark, small mixed, and wormy lots; and 21*s.* 6*d.* to 23*s.* per cwt. for dusty and wormy root.

CAMPHOR.—There is no alteration in the market, either as regards *Crude* or *Refined*. The latter is still quoted on the basis of 1*s.* 4*d.* per lb. for bells, while for the former no reliable quotation exists at present. There has been no further news from China, so far as we are aware.

CANNABIS INDICA remains unchanged. Twenty-eight packages were offered at auction at 3*d.* for rather brown and stalky tops. At that price business is being transacted privately.

CANTHARIDES were not offered to-day, but we understand that full prices are being privately paid for *Russian* as well as for *Chinese* flies.

CARAWAY SEED.—New *Dutch* seed may still be had in quantity at 22*s.* to 23*s.* per cwt., while *Russian* is comparatively cheaper at 21*s.* to 22*s.* per cwt. Good to fine *English* is worth from 25*s.* to 27*s.* per cwt.

CARDAMOMS.—Only a small quantity was offered for sale to-day, and mostly disposed of, with excellent competition, at an average advance of fully 2*d.* per lb. for fairly good lots, which formed the bulk of the supply. *Ceylon Malabar*, good pale sound, medium to bold, 1*s.* 10*d.*; rather smaller and yellower, 1*s.* 8*d.*; small to medium fair yellow and warty, 1*s.* 6*d.* to 1*s.* 7*d.*; very small round, 10*d.*; husks and split, 5*d.* to 7*d.* per lb. *Mysoore*, fair medium to bold pale round, 2*s.*; long pale medium to bold size, 1*s.* 9*d.*; medium and small mixed, 1*s.* 5*d.*; small, 1*s.* 2*d.*; very small thin pale, 9½*d.* to 1*s.* per lb. Seeds sold at 1*s.* 4*d.* to 1*s.* 5*d.* per lb. *Aleppy*, fairly good brown, 11*d.* to 1*s.* Thin small *Tellicherry* held at 4*d.* per lb. The following are the quantities of cardamoms exported from Ceylon during the last five seasons:—

	Lbs.
1887-88	310,635
1886-87	321,560
1885-86	236,056
1884-85	152,405
1883-84	66,319

CASCARA SAGRADA.—10*i.* per cwt. is now asked by importers for small lots, prompt shipment. A 2-cwt. bale of very good quality, shown at to-day's auctions, was bought in at that price, 9*i.* being offered and declined.

CHAMOMILES.—Prices keep very high, as may be gathered from the fact that 4 bales of very fine white *Belgian* flowers offered at auction to-day are firmly held at 5*l.* 10*s.* per cwt., a bid of 5*l.* being declined.

CINCHONA.—South American barks were in small supply to-day, and none were sold. Two boxes of flat red bark (South American) were shown, one (100 lbs.), containing exceptionally fine bold red pieces for which 10*s.* or 11*s.* per lb. is required, the other (56 lbs.), of good colour, but broken and dusty, was bought in at 4*s.* 6*d.* per lb. The following are the exact figures of the cinchona shipments from Ceylon during the last five seasons:—

	Lbs.
1887-88	11,704,932
1886-87	14,339,184
1885-86	15,361,912
1884-85	11,678,360
1883-84	11,492,947

The total exports of cinchona from Java during the month of August were 262,452 Amst. lbs. This was all grown on private plantations, and about one-fourth of it has been sent to London, the rest going to Amsterdam. Mail advices from Ceylon stated that the season just closed has been remarkable for the collapse of public sales throughout the year; and that there is little doubt that on many estates the cultivation has been given up entirely in favour of tea. According to the latest returns, it is calculated there are still 35,000,000 trees under cultivation in the island, and taking ¼ lb. dry bark per tree as the annual outturn, this would give a crop of almost 9,000,000 lbs. as the estimate for 1888-89.

CIVET.—Three horns, reputed direct import from Massowah, were offered to-day, but remained unsold. The owner is said to require 16*s.* per oz.

COCAINE.—The inquiry continues to be very good, but prices have not been advanced as yet.

CONDURANGO.—Owners are now freely accepting the prices which they refused at the preceding sales. 27 bales sold to-day at 7*d.* to 8*d.* per lb. for dark and mostly very woody bark.

COPPER (SULPHATE).—There are sellers at 21*l.* per ton.

COWHAGE.—Rather sandy quality may be had at 6*d.* to 7*d.* per oz.

CREAM OF TARTAR remains stationary at 105*s.* to 107*s.* per cwt. for first white powder.

CROTON SEED.—A small lot of fairly good pale Ceylon seed was disposed of to-day at 18*s.* per cwt., which shows some improvement.

CUBEBS.—The *Europa* has brought us a consignment of 24 bags from Singapore. Nothing was offered at to-day's auctions, but privately the price remains unchanged at 26*l.* to 27*l.* for good genuine berries.

CUMIN SEED.—*Malta* keeps steady at 40*s.* to 42*s.* per cwt., according to quality.

CUTCH.—At the drysaltery auctions over 2,000 boxes were offered, but the better lots were all withdrawn, and only about 700 boxes ordinary sand-mixed stuff sold at 12*s.* 9*d.* to 17*s.* 3*d.* per cwt. Privately 29*s.* 6*d.* per cwt. has been paid for fair MM tablets.

CUTTLE-FISH BONE.—For a parcel of good bold pale bone 7*d.* was refused to-day, the same figure being accepted for a lot of pale but broken quality.

ERGOT OF RYE steady. For wormy *Spanish* ergot 10*d.* is asked, 9*d.* being refused, while fairly good bold *Russian* is held at 9*d.* per lb.

FENUGREEK SEED steady at 8*s.* 6*d.* to 8*d.* 9*d.* for good *Mogadore*, while *Egyptian* is worth from 6*s.* 9*d.* to 7*s.* per cwt.

GALLS.—*Turkey* galls have been somewhat neglected since last week. At to-day's auctions 112 bales were all bought in at previous rates, except a few packages of ordinary quality, and sweepings, which sold at 41*s.* to 48*s.* per cwt. At the public sales 100 cases very good pale *China* galls were shown. They are held at 65*s.* per cwt., and an offer of 63*s.* was refused. Privately 64*s.* 6*d.* has been paid for this variety, and 62*s.* 6*d.* for *Japan* galls. A cablegram from Shanghai, received to-day announces a rising market, and quotes new crop for arrival at 63*s.* 3*d.* per cwt. "c.i.f." The new crop, it has now been definitely ascertained, will be a very small one.

GAMBIER.—*Block* gambier continued to advance in all positions until the middle of the week, when the rise was checked, and when the monthly statistical returns proved to be rather unfavourable quotations dropped about 6*d.* per cwt. They now stand as follows:—Spot, 28*s.* 6*d.* accepted, after 29*s.* had been paid; September-October, 27*s.* 3*d.*; October-November, 27*s.*; November-December, 26*s.* 3*d.*, since declined to 25*s.* 9*d.* Free *cubes* are held at 41*s.* per cwt.

GAMBOGE.—Firmly held, but without any appreciable change. At the auctions an offer of 12*l.* per cwt. was refused for four cases very broken and slightly caked pipe of fairly good fracture.

GENTIAN ROOT held at firm rates, viz., 16*s.* 6*d.* to 17*s.* per cwt. for good quality.

GLYCERINE remains as quoted last week, at 65*l.* to 70*l.* per ton for s.g. 1.260 double distilled, according to brand.

GOLDEN SEAL ROOT rising. In New York the price is now quoted at the equivalent of 2*s.* 6*d.* per lb., London terms.

GUARANA is quoted much dearer in New York, and in sympathy with this advance more money is required here.

GUM ARABIC remains very firmly held, and in the absence of true Turkey gums substitutes are selling at extreme rates. Twenty-three cases good soft palish *Cape* sorts at 7*l.* 10*s.* to 7*l.* 12*s.* 6*d.* *White Mogadore*, rather dark and drossy mixed is quoted at 9*l.* 2*s.* 6*d.* per cwt.

GUM BENJAMIN still continues to arrive in quantity, 72 cases having been landed during the week per *Cathay* from Singapore; but, notwithstanding this fact, and the cataloguing of large quantities for the auctions, prices showed a decided improvement to-day. *Siam* gum is in large supply, but holders do not show much eagerness to realise. Exceptionally fine bright loose almonds are limited at 22*l.* to 24*l.* 10*s.*; and for small bright but blocky ditto 14*l.* 10*s.* was refused. Fair blocky third siftings brought 7*l.*; duller ditto, 6*l.* 10*s.*; and ordinary, 5*l.* 7*s.* 6*d.* to 5*l.* 10*s.* Of *Sumatra* gum 10 cases fine white almondy seconds, of good flavour, and only slightly false packed, realised an advance of 15*s.* to 20*s.*, viz. 9*l.* to 9*l.* 12*s.* 6*d.*; while good flavoured ditto, of rather dull appearance, brought 6*l.* 7*s.* 6*d.* to 6*l.* 10*s.* A few cases *Palembang*, good almondy, in small tins, sold at 72*s.* 6*d.* to 75*s.*

GUM GUAIAIACUM.—Six cases were offered. For somewhat stony looking block 1*s.* 10*l.* was refused, while common pieces sold at 1*s.* per lb.

GUM MYRRH.—The high rates demanded tend to check business. For a parcel of fine select drop 8*l.* per cwt. is asked, while 77*s.* 6*d.* was refused for good coarse siftings, 80*s.* being the limit.

HONEY.—Several consignments were offered to-day, and *Jamaica* brought again rather better prices as compared with the preceding auctions; dark candied to good liquid brown selling at 33*s.* to 40*s.* per cwt. Fairly good yellow candied *Chili* sold at 45*s.*, and for fair ditto *Californian* 37*s.* 6*d.* is named as the price.

INSECT FLOWERS.—*Dalmatian* without business. In the *Caucasus* there has been quite a run on the flowers this season, and although most of the flowers sent from that quarter are of common or only medium quality, as the flowers are gathered when over-ripe, and are not sorted, the price rose from 10 roubles at the commencement of the season to 16 to 17½ roubles per pood for the best lots. The crop was rather large, but has now nearly all been sold to Marseilles and Vienna houses.

IODINE and iodides are unaltered at last week's quotations.

IRECACUANHA.—About 40 packages were offered to-day, and it was generally expected that prices would show some decline. But such was not the case, the greater part of the supply in the hands of one broker being practically withdrawn when it was found that buyers were somewhat laggard. The second parcel might have been sold at full rates, but was also bought in, the holder refusing 6*s.* 6*d.* for good, slightly mouldy, and 7*s.* 1*d.* per lb. for picked root. Three cases, about 9 cwt., of the spurious *East Indian* root frequently mentioned were shown. The owners will be glad to supply samples to applicants, but it is very doubtful whether that will lead to business.

ISINGLASS.—At the periodical auctions held this week prices were irregular, but mostly lower, *Brazil* being quiet and unchanged, *Bombay* pipe 1*d.* to 2*d.* cheaper, *Penang* leaf 1*d.* cheaper for ordinary, but fine 2*d.* dearer, tongue 2*d.* to 3*d.* cheaper, purse 1*d.* dearer. Cablegrams from Shanghai state that the market there is bare of stock.

JALAP steady. Good *Vera Cruz* still sells at 5½*d.* per lb., and damaged lots at 4½*d.* to 5*d.* per lb.

LIQUORICE ROOT.—At the auctions 27 bales good decorated *Russian* are held at 30*s.* per cwt., a figure at which there were no purchasers.

MATICO.—Eighteen bales were offered to-day, and sold at less high rates than might have been expected after the recently prevailing scarcity. Good green slightly broken leaves went at 10*d.*, and dark and broken ditto at 7*d.* per lb.

MERCURIALS are unaltered, the quotations being as follows: *Calomel*, 3*s.* 6*d.*; *Corrosive sublimate*, 2*s.* 10*d.*; ointment, 2*s.* 2*d.*; *Red precipitate*, 3*s.* 9*d.*; white ditto, 3*s.* 3*d.*; *Blue pill*, 2*s.* 1*d.*; *Vermilion*, English, 3*s.*; Chinese, 2*s.* 9*d.* to 2*s.* 10*d.* per lb.

MORPHIA.—The manufacturers quote 4*s.* 6*d.* per oz. now, although 4*s.* 3*d.* might not be unacceptable; but there are still a good many cheaper lots in second-hand.

MUSK—There do not appear to have been any direct arrivals from China yet since our last report, but the *City of*

Oxford brought two cases from Calcutta. This is probably grain musk of more or less doubtful purity. At to-day's auctions about 20 caddies *First pile Tonquin* were shown, but not any of them were of the very finest grade. Holders show no disposition to meet the market, and on the other hand buyers evince a determination to hold off as long as they possibly can. Two caddies small to bold pods, well trimmed, dry, old-fashioned skins are limited, it is said, at 105*s.*; six others, not quite so good, at 100*s.*; while for seven caddies small to bold, fairly well trimmed, with top and underskin, 88*s.* 6*d.* was refused. Fine *Third pile*, adulterated, sold at 53*s.* 6*d.*; ordinary badly trimmed wet, at 30*s.* to 28*s.* Good *Grain* musk brought 50*s.*; and rubbish, from 5*s.* to 7*s.* per oz.

NUX VOMICA.—About 750 packages were offered to-day, but the quality was not very good, and only the lowest lots were sold; *Cochin*, dark, partly perished and damaged, 6*s.* 3*d.* to 7*s.*, and sweepings, 2*s.* Fifty-one bags, fairly good, silky, partly dark, mixed seed, were said to be sold at 11*s.* to 12*s.* 3*d.* per cwt.

OIL (CASTOR) fairly steady, but with less business. Fine *Italian* and *Calcutta*, 4*d.* to 4½*d.*; fairly good mixed *Coco-nada*, 2½*d.* per lb.

OIL (PALM) firm and tending dearer, the stock remaining in a very narrow compass. From 24*l.* 10*s.* to 25*l.* 10*s.* is quoted for good to finest qualities.

OILS (ESSENTIAL).—*Star anise* oil is offering from China, at 5*l.* 11*d.* per lb. "c.i.f." terms, while *Cassia* is held at 2*s.* 9½*d.* "c.i.f." now, and at 2*s.* 11*d.* to 3*s.* per lb. on the spot. *Clove* oil is dearer, and offers at 4*s.* 9*d.* to 5*s.* 6*d.*, according to brand. French *Lavender* is advancing quickly in the south. Of *Peppermint* oil, 10 cases (H.G.H.) were offered, but no one seemed willing to bid 14*s.*, and so the lot was withdrawn. Some ordinary *Ylang-Ylang* sold cheaply at 2*s.* to 2*s.* 5*d.* per oz. *Otto of rose* firm but unchanged.

OPIMUM.—A further advance has occurred in *Persian* opium for which 14*s.* is now asked, while 13*s.* has been paid, and very little is offering. In China the stock of this opium is now said to be reduced to under 300 cases. In *Soft shipping* sorts there is little business doing, *Malatia* being quoted at 14*s.* 6*d.*; *Tokat* at 14*s.* to 14*s.* 6*d.*; and *Salonica*, which is rather firmer, at 13*s.* 9*d.*—3*d.* per lb. less having actually been paid. In *Smyrna* the market is firm and animated, somewhat higher prices having been paid for a considerable quantity.

POTASH SALTS.—*Bichromate*, quiet, at 4½*d.* per lb. *Chlorate*, steady, but quiet, at 5½*d.* to 5¾*d.* per lb. on the spot, and a little higher for forward delivery. *Prussiate*, unaltered, yellow English, 6½*d.*; foreign, 6½*d.* to 6¾*d.* per lb.

QUASSIA WOOD.—Twelve tons may be had at the price of 7*s.* per cwt.

QUICKSILVER is still nominally held by the owners at 9*l.* 10*s.* per bottle, but second-hand holders are rather quieter than last week, and sell readily at 9*l.* 1*s.* to 9*l.* 2*s.* per bottle.

QUININE.—A large business, amounting to over 200,000 oz. is said to have been transacted since last week at advancing prices, the rise being between 1*d.* and 1½*d.* per oz. since the date of our last report. Whether the quantity reported as having been sold has actually changed hands it is, of course, impossible to say; but there seems no doubt that a considerable movement has really taken place. The B & S and Brunswick factories are said to have been the principal sellers. The former works now quote 1*s.* 6*d.* to 1*s.* 6½*d.* for delivery early next year, and they claim to have actually made sales at the lower figure. *Whiffen's*, *Jobst's*, and *Zimmer's* brands are quoted at 1*s.* 6*d.* per oz. in bulk; *Howards* and *Pelletier's* brands remain unchanged. It is not, of course, an easy matter to give the precise reasons for every small fluctuation in the article, and the only safe guide to the future is, we are convinced, to entirely leave out of account the manoeuvres of the different speculators. We hear rumours of all kinds concerning these operations, such, for instance, as that the London agency for a foreign manufacturer recently sent large quantities of quinine bought here back to the Continent for the purpose of being repacked and then tendered to buyers in fulfilment of contract. But rumours of this kind are always in the air, and no great importance should be attached to them.

RHUBARB.—There was a fairly large supply of this root offered at to-day's auctions. At first bidding proceeded very slowly, and sales were effected with difficulty, but gradually the tone improved, and full prices were paid, the bulk of the lots offering being disposed of; *Shensi* fine, medium to bold round, yellow coat, $\frac{3}{4}$ even pinky grey, $\frac{1}{4}$ dark fracture at 2s. 7d., smaller ditto at 1s. 8d. to 1s. 9d., good bold flat, rather dark fracture 2s. 1d., orange coated ditto, pinky grey fracture 2s., small to medium sized round, woody coat and partly dark in fracture 1s. 1d. to 1s. 2d., spongy pickings to dull medium to bold woody root 10d. to 1s. per lb.

SAFFRON.—News comes from Spain that the prices paid for the first lots of the new crop are actually in excess of those ruling before its arrival. Old stocks are very low everywhere.

SARSAPARILLA.—Only a few lots were offered to-day and sold rather cheaply, *Lima Jamaica* in bundles, slightly to badly damaged at 11d. to 1s. 2d., damaged red native root at 11d. to 1s. 2d. per lb.

SENEGA.—Holders still hold firmly at prices ranging from 2s. 9d. to 3s. per lb. for good Western root. At the auctions several lots were offered, but only a few bales sold at 2s. 4d. to 2s. 5d. per lb. for thin and dusty root, of very little flavour.

SENNA.—Notwithstanding the arrival of 260 more bales from Bombay since our last report, nearly the whole of the supply of *Timmerly* leaves offered to-day (about 250 bales) sold at very high rates, viz., an advance of $\frac{3}{4}$ d. to 1d. per lb. on ordinary and medium qualities, and fancy prices for a few fine lots. The bulk of the leaves were bought for American account. Fine bold leaves, green to slightly off colour, sold at 1s. 2d. per lb.; slightly smaller, 8 $\frac{3}{4}$ d. to 10 $\frac{1}{2}$ d.; medium to bold, good colour, 6 $\frac{1}{2}$ d.; good small to medium greenish, slightly rusty, 3 $\frac{3}{4}$ d. to 5 $\frac{1}{2}$ d.; ordinary yellow, small to medium, 2 $\frac{1}{2}$ d. to 3 $\frac{1}{4}$ d.; common dark, $\frac{1}{2}$ d. to $\frac{3}{4}$ d. per lb.

SERPENTARIA ROOT.—All cheap lots of Texas root have been bought up in the States, and the price has now advanced to 1s. 5d. per lb. London terms.

SHELLAC.—At Tuesday's public sales 675 cases—a moderately heavy quantity—were offered, consisting of

Orange 587 cases, of which 123 were sold			
Button	83	"	21
	"	"	"
	675		144

No garnet lac was offered. The smallness of the proportion disposed of is accounted for by the reluctance to sell displayed by the owners, who affected great independence, and often refused offers which a few days ago they would probably have been glad to accept. The lots sold were mostly well competed for, and the orange lac realised an advance of fully 3s. per cwt. as compared with last Tuesday's rates. A rather large proportion of good and fine orange lac was shown, and passed the hammer as follows:—*Fine Orange*, 70 cases very fine pale strong X in circle SSL were bought in at 90s. per cwt. nominally. For another lot of fine BSL 63s. was refused, while for 20 cases fine VSO 70s. was asked. Another parcel of V.S.O. lac, of different make and darker, sold at 65s., G in double triangle slightly crinkly and cakey, and A.S.S. at 66s., good but cakey worked ASSL at 64s., very good strong second orange at 58s., and fair but rather dark seconds at 53s. per cwt. Of *Button* lac 50 cases good blood are held at 72s., an offer of 70s. being declined; 16 cases good coloured but very hard blocky firsts brought 62s., bidding being started at 45s., and a parcel of good thirds are said to be held at 48s. per cwt. Since the auctions there has been a very good demand, and prices have further improved all round, with large sales of *Garnet A.C.* lac at 46s. to 47s. spot, and *Second orange* (TX) at 55s. to 57s. spot. Our stock has now diminished to 74,045 cases of all sorts, being a decrease for the month of 3,713 cases. It is stated that as regards the stock in the United States a careful estimate, based upon the average consumption of the first nine months of the year, shows that at the end of the year there will probably be a stock of less than five thousand cases the smallest known for many years.

TAMARINDS.—Forty barrels, rather ordinary East Indian, sold well at 8s. per cwt.

TEA.—The *China* market is very steady, with rather more business doing. Common Shantams, 1883-9 season, sell 4 $\frac{1}{2}$ – $\frac{3}{4}$ d., but common new Kaisow is in very small supply. The deficiency, however, is made up by an abundance of common to fair old season's Kaisow, which sells from 4 $\frac{1}{2}$ d. to 5 $\frac{1}{2}$ d. in same quantity. Capers are slightly easier, and common to fair common teas have sold from 6d. to 7d., showing a decline from the highest point. *Assams* remain very firm, Souchongs fetching 7 $\frac{1}{2}$ d., and common broken 6 $\frac{1}{2}$ d. to 7d. Pekoes from 9d. to 10d., however, show the advance in much less degree, and are relatively cheap. *Ceylons* remain very firm, and buyers who went into stock a month ago can afford to pass the common leaf teas, which are now eagerly snapped up at 10d. per lb. The total exports of tea from Ceylon, which had been expected to reach 22,500,000, only fell slightly short of that total, having been actually 20,755,799 lbs. It is said, however, that the season has not been a favourable one on the whole, as the hot dry weather which prevailed during January and February seriously impeded the flushes, and the monsoon, although an early one, was a partial failure during July and August. As regards the new season, it is said that there are now 183,000 acres under tea cultivation in the island, of which 133,000 are in bearing, and the total yield is expected to amount to 32,640,000 lbs.

TONQUIN BEANS.—For good black Pará beans, slightly mixed with foxy, 2s. per lb. is asked.

TURMERIC.—There is very little life in this article, and only a few parcels were sold by auction at 6s. 6d. to 5s. 9d. for sound, but dark to damaged, *Madras* bulb, and 6s. 6d. for woody and damaged finger.

VALERIAN ROOT is selling at 23s. per cwt.

VANILLA.—The latest mail reports from Mauritius state that the outturn of the coming crop in that island will be a small one, and is not expected to exceed 34,000 lbs. At to-day's auctions over 200 tins were offered, and nearly all sold at good to slightly dearer rates. Common long, 8s. to 9s.; ordinary small and brownish, slightly crystallised, 5s. to 9s.; good chocolate, 4 to 7 inches, 6s. to 10s.; 7 to 7 $\frac{1}{2}$ inches, 11s. 6d. to 14s.; 8 inches, 13s. to 19s.; fine, 8 $\frac{1}{2}$ to 9 $\frac{1}{2}$, 23s. A large parcel of very ordinary beans, said to be salvage from the Yorouba, but resembling very nearly the pods from the African West Coast which we noticed in a recent issue, sold at 5s. to 6s. 6d. for the best, and from 2s. to 1s. 1d. per lb. for the commonest lots.

WAX (BEES').—*Jamaica* continues to bring very good prices, and other varieties are also in good request. Fine even yellow *Jamaica* sold at 6l.; good orange, 5l. 15s. to 5l. 17s. 6d.; good red and orange, 5l. 10s.; brown and chocolate mixed, 5l. 7s. 6d. to 5l. 2s. 6d. per cwt. Good bright *Madagascar* brings 85s. per cwt.

WAX (JAPAN).—For a lot of good pale squares, shown at the auctions, 48s. is said to be the limit; ordinary yellow and greasy squares were bought in at 46s. 6d. per cwt. A parcel of 101 cases, recently imported, but badly smoke damaged, discoloured, and broken, was disposed of "without reserve" at comparatively good prices: sound, but greasy and yellow, 44s. to 45s. 6d.; damages, 38s. to 41s. per cwt.

THE AMERICAN MARKETS.

NEW YORK, October 17.

THOUGH a fairly steady outlet is reported by most firms in the trade, yet the distribution of drugs, dyestuffs, and chemicals falls considerably below the expectation of importers and dealers for this period of the year. Occasionally some speculative interest manifests itself, but as a rule purchases are gauged very closely to the requirements of the moment, the future being given little or no consideration.

One of the features of the week has been the rapid advance in the price of

CAMPOR (REFINED), influenced partly by the reports cable from London of the diminished supply of crude, but principally by the anxiety entertained over the non-arrival of the *General Donville*, which vessel was known to have 266 tons, and which, if lost, would create a positive scarcity, and lead

to materially higher prices. Up to Friday last the excitement ran high; refiners were actively petitioned to accept orders, but so numerous did these become that by fractions the value was gradually advanced to 29½ cents, at which orders for delivery were booked. By this time refiners became somewhat uncertain of their ability to execute the business that was being urged upon them, so they finally concluded to decline further orders until their position could be better understood. While deliberating over Sunday the vessel made her appearance at Sandy Hook, one hundred and eighty days from Hio, and this settled the question of future stock; so on Monday the demand subsided, and many who had been eager to place their orders began to wish they had acted less hastily, but the refiners, having booked a large business at the advance, were not disposed to give up the ground they had gained, so, as a partial protection to those who had purchased, they have determined to hold the price at 30 cents in barrels, putting forth the statement that this action is necessary in consequence of the high value at present ruling for crude in the primary market.

CHEMICALS (HEAVY BRITISH).—The market for British heavy chemicals continues very firm, with indications of a rising tendency. *Soda ash* is very scarce; in fact, there is little or no stock obtainable at the moment. For 48 per cent. \$1.20 to \$1.25 is asked, and 58 per cent. \$1.15. *Bleaching powder* is scarce, and in demand at \$2.15 to \$2.20. *Caustic soda* is well sustained at unchanged prices. *Sal soda* is quoted 92c. to 95c. to arrive, and \$1 spot.

GUARANA has advanced to-day to \$1.15, with sales of some 1,500 lbs. reported, understood at about \$1.10.

GUM GUAIACUM is tending better, owing to the small quantity at present available.

OIL (PEPPERMINT) is unsettled and nominal, due to reports from the country which advise extreme prices being paid by local operators. In the West \$2.30 to \$2.35, it is said, has been obtained; and in Mayne Co., New York, business has been done upon the basis of \$2.50 for prime. Dealers here are somewhat at a loss as to what course they should pursue under the circumstances, very few entertaining confidence in the advance. To-day there are some sellers of stock in this market at \$2.30 to \$2.50 as to quality, though naturally they are reserved in their offerings; while others have advanced their ideas to a par with those entertained in the country districts. For H.G.H. oil the quotation is \$3.20, at which some 25 cases have been purchased for local account, but some holders decline to offer goods at this figure, being uncertain of their ability to duplicate the same. Exporters' limits are about \$3, but being unable to secure stock at this price, their "occupation" for the time is gone.

OIL (SASSAFRAS) is coming forward rather more liberally, and sells, as it arrives, at 60c. to 62c. The demand is urgent.

OPIUM.—The frequent reports of a higher market in Smyrna are without influence here. In fact, holders appear quite free to offer, and have signified a willingness during the past few days to accept \$1.90 in bond for ordinary, or what is termed "pudding," but even this concession fails to attract buyers for any important quantities. The higher test goods are yet held at \$2.25 in bond, though sales of such are rare.

QUININE.—The market for foreign brands has been a trifle more active of late, due, however, wholly to increased country requirements, and not to speculative action. "Gold and silver" and "Brunswick" have sold at 33c.; but for "E & S" it would be difficult to do better than 34c. to 35c., as holders of such are not anxious sellers. Supplies here are quite large, and the future of the article enveloped in doubt; few, however, anticipate any important early advance of a stable character.

ROOTS AND BARKS are firmly held, and the position is strengthened by the purchases which are being made for shipment to Europe. *Senega* is quoted 62c., with indifference shown to bids under. *Cascara sagrada* has been in better receipt, and exporters have secured some 5,000 lbs., paying for same 30c.; but it would be difficult to-day to obtain additional quantities under 32c. Sales of 5,000 lbs. of *Golden seal* root have been made for shipment abroad at

47c., and this price is quoted as inside market value to-day. Texas *Snake* root is now established at 30c., this price having been paid for small lots in several instances.

SHELLAC.—Encouraged by advancing prices from London and higher cables from Calcutta, holders of shellac are maintaining the market upon a firm basis. The consumptive demand continues of fair volume, and the stock by this means is being gradually lessened, though the best authorities credit this market with possessing as yet some 17,000 cases of all marks. With the consumption running at the rate of about 1,800 to 2,000 cases monthly, and additional supplies not obtainable from Calcutta direct within four months' time, the position of the article is considered as favourable.

VANILLA.—Mexican advices have been pouring into this market during the week of heavy rains and floods in the vanilla-producing districts, and a probable destruction of the growing crop, which matures next spring. In consequence of these reports considerable demand has been stimulated here, followed by purchases of some 1,500 lbs., which quantity has been secured by the various jobbing houses from importers. The price shows an advance of about \$1 per lb. as compared with those current at the opening of last week.

CHEMICALS IN THE NORTH OF ENGLAND.

DURING the past week there has been a more active inquiry for chemicals generally, chiefly for forward delivery, and makers are now more disposed to accept contracts for next year, as the salt trust does not appear to be likely to become a complete monopoly. It is now expected that before we are well on into next year various new sources of salt supply will be before the public.

ACIDS.—*Tartaric.*—This article is in a most peculiar position, but no doubt the fall in value may be caused by some special operations on the part of makers. The present lowest quotation is reported to show a loss of 1d. per lb. in the manufacture. The London quotation is peculiar. Here our lowest quotation is 1s. 4¾d. to 1s. 5d., and some considerable business has been done between these figures for forward delivery. *Citric* has also declined in sympathy with tartaric, and closes flat at 1s. 6d. per lb. *Ovalic* is very firm at 4d. per lb. *Boracic* meets with more inquiry, and is firmly held on spot at 27s., and makers are asking 26s. for all next year.

BORAX.—There has been a much better tone in this article. Shipping orders have been coming in freely, and buyers are anxious to purchase, not only for prompt, but for forward delivery. Makers generally, however, decline at present to quote for next year. The position of Californian borax is peculiar. The value here has advanced to 32s., and we hear that the price in New York is 38s. It is clear that a further advance of a few shillings per cwt. will enable us to ship English borax, pay the duty, and compete in the New York market.

BLEACHING POWDER.—The demand for the article continues, and the supplies have been very limited, both for the home trade and for export. The market continues to harden, and we are likely to have a further advance. The present closing quotations are—soft, on rails, 7l. 10s., and hard, f.o.b., 8l. to 8l. 2s. 6d.

POTASH SALTS.—*Chlorate* has been in less request, second-hand parcels having somewhat weakened the position recently made by makers. The present values range from 5½d. to 5¾d., but for all next year higher prices are asked. *Bichromate* has been very steady at 4¾d. per lb.

SODA SALTS.—*Caustic soda*, affected by salt and the advance in coal, is dearer for forward delivery, 7l. 7s. 6d. having been freely paid for next year; on spot, however, second-hand parcels have competed for orders, resulting in a weak market, and closing flat at 6l. 5s. for cream, and 6l. 7s. 6d. for 60 per cent. white, and 7l. 7s. 6d. for 70 per cent. white. *Bicarbonate* is better, and supplies have become somewhat scarce for prompt shipment at 4l. 10s. to 4l. 12s. 6d. *Crystals*, again affected by coal, have been in steady request, and have advanced to 2l. 12s. 6d. per ton, with a further advance probable.



Memoranda for Correspondents.

Always send your proper name and address; we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest; we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, queries, &c. will be attended to in the order received.

Poisons Regulations.

SIR,—The conflict of opinion on this subject is likely to be long and bitter.

I believe it to be a fact that chemists are of all men the most careful. *Prima facie*, the less interference with them the better. And if some heroic legislation is to be forced upon us, let us know at the outset what is to be its extent.

The lucid account you gave last week of poison regulations in France and Germany naturally makes us suspect that we are to be compelled to establish a system of locking up our poisons. At least one is not disposed to expect anything more original than the lock-and-key idea. At present, although open to conviction, and consequent change of opinion, I think we should be prepared to assure the powers that be that we do make use of some system of distinguishing poisons and of regulating their use. But this is the extent of interference which I would concede.

Some chemists make a parade of their poison cupboard. But familiarity, &c., and I have seen small editions of the poison bottles all in a row in the dispensing screen or department simply labelled *poison*. Where is the safety or consistency of this arrangement? The very element of danger is in the place of labour; and another element of danger is in the tendency to make the poison cupboard presentable by having rows of uniform bottles, which may more easily be mistaken for each other than if they were dispersed among their more innocent neighbours.

I object also to the expense of structural alterations, in case a special cupboard has not been included in the original fitting-up. We can easily, unless single-handed, check each other in weighing and measuring potent drugs. I think one or two alternatives should be given to us. My own preference is for a complete system of labelling. And we may, upon some special occasion (such as when paying our annual contribution to the local secretary for the Society), sign a declaration that our system of regulating the storage and dispensing of poisons is in perfect working order and calculated to ensure the safety of the public.

Yours truly,

HEDER. (165/69)

SIR,—The march of events is often pitiless to the repose of nations, and not less so towards classes of men. But the tendency of Englishmen is not usually in the direction of a distressful anticipation of coming evil. In this mood pharmacists have in the past awaited aggressive legislation, and have dealt with it, as best they might, on its merits. Their old acquaintance, the storage of poisons question, reappears now in more doubtful guise. Is the fly idly thrown across our track, or is it with a serious belief in its killing powers that it is dressed cunningly with assurances of good things, that are little short of a promise of the lasting favour of the gods? Could not some of the last batch of "Preliminary" students supply us with a classical quotation on this "bearing of gifts" and the attitude it should inspire?

However, I concur in the opinion that it will be for the public advantage if those who were actively concerned in 1871 in Parliamentary opposition to the Bill introduced by the Privy Council now restate why they took such a course.

I will do this with the full admission that the lapse of seventeen years may have changed the circumstances, and consequently the policy that should now be adopted, and that the new jury should try the case on the evidence, as if it had not been heard before.

Briefly, the Bill of 1871, "The Pharmacy Act (1868) Amendment Bill," proposed to confer on the Privy Council the power to "frame regulations as to the matters aforesaid"—*i.e.*, "the keeping, dispensing, and selling of poisons." When passed, it would have become an integral part of the Act of 1868, and breaches of its regulations would be subject to the same penalties, varying from the standard penalty of 5*l.* to removal from the register at the will of the Privy Council. The House of Lords passed the Bill, only three days elapsing between the second and third readings; but when its provisions were known to and considered by chemists throughout the country, extensive opposition to the Bill was organised, and a majority of the Council of the Pharmaceutical Society supported this opposition.

The origin of the measure has always been stated to have been an engagement given by the then President of the Pharmaceutical Society, Mr. George Webb Sandford,* to the principal medical officer of the Privy Council, to the effect that such regulations should be made. Now, it was clear that if the President entered into such a compact it was *ultra vires*, for neither the Council nor the Society understood that they were committed to such a step. When the proposals of the Bill became known the experience of practical men in all parts of the country led to their condemnation. It was one thing for each to adopt careful precautions for the storage of poisons, but quite another to assent to a proposal that the State should declare scheduled poisons to be dangerous only when in the custody of the one class trained to deal with them. It was manifest that the danger was either inherent to the poison, or attached to it because of the imperfections of its custodians. The Bill ignored the first theory absolutely, for it left half the poisons in the country uncared for, the surgeries of medical men, of veterinary surgeons, and the dispensaries of hospitals being untouched. Some critics have asked what right the pharmacist had to go beyond his own case, but the answer was plain—the object of the Bill was known to be the affixing of danger signals to poisons; it was to be a mechanical check superadded to the greatest protection of all, *viz.*, the education of the chemist made compulsory by the Act of 1868. And yet half the poisons of the country were to go without this protection, the practical experience of a wide circle of chemists, at the same time showing that the persons taking dispensing duty were constantly interchangeable between shop and surgery, or hospital and shop, the same person frequently taking duty in both places on the same day. Jacob Bell's axiom, that "a weak fence round a dangerous pond was itself a danger," was appropriate here, for it was inevitable that dispensing accidents would be created by the well-meant but most unpracticable attempt to prevent them.

Then came the question of the machinery to carry out the purposes of the Bill; it defined none, and an inquiry would be met by a cheerful twinkle of the eye and the assurance that we should hear no more if the Bill was only passed. This was a heavy draft on one's credulity, and it was clear that if it were true this year, the official class would not be likely long to omit the duty of appointing inspectors. As probably nine out of ten chemists had house and shop together, and few of them failed to store some goods in rooms connected with their residence, the prospect of inspection was not to be ignored as being of no consequence. Given inspections and inspectors, prosecutions would follow as a matter of course, or how would their existence be justified and continued? Every master being responsible for the act of every servant, no one would be safe against technical breaches of such an Act. The very question of what was a legal poison was in the most hazy state, as "the preparations of" opium and other scheduled drugs in-

* It will give pleasure to many of your readers if I say that last month I had the gratification of seeing Mr. Sandford in his retirement at the patrimonial house in Norfolk, where he quietly enjoys his pleasant surroundings. His many services to the cause of pharmacy are held in grateful remembrance, and not the less so by those who opposed the Bill of 1871.

luded lozenges, not to mention paregoric elixir, about the legal status of which the wildest doubt existed. For the official statement of objections to the Bill, the reader must be referred to the memorial to the Right Hon. W. E. Forster, I.P., Vice-President of the Council, adopted by a special meeting of the Council of the Pharmaceutical Society on June 4, 1871. Such reasons as these induced us in 1871 to appeal to our Parliamentary representatives to consider our objections to the Bill, which was ultimately withdrawn by the Government at the end of the session.

By all means let the case be reconsidered now. Let us ask ourselves whether any of the circumstances have changed since 1871, and it will not be amiss to inquire what our experience has been under the vagaries of a few (exceptional) public analysts who have tortured the Food and Drugs Act. There is one changed circumstance we shall probably be told, being more than hinted that in consequence of our action in 1871 the Medical Department of the Privy Council has persistently refused us facilities for legislation, and continues to do so after an interval of seventeen years. I shall be no party to the assertion of such a libel, monstrous if true, and which surely cannot be an accurate indication of cause and effect.

It may be that the spirit of our people has been broken by the strain put upon it by the events of the last few years, and that irrespective of the merits of the case, and in spite of their little disposition towards intrigue, they may be induced despairingly to sell their birthright of fair and equal treatment and allegiance only to laws supported by the judgment of Parliament. Such bargains were undoubtedly made at an early date in the world's history, and the consideration in one of the earliest was very much like that put before us now—"a mess of pottage." But that bargain did not prove a good one.

Leeds, October 30, 1888.

RICHARD REYNOLDS.

How He Made His Railway Fare.

SIR,—Some time ago a young gentleman, who was evidently a chemist's assistant, was enjoying his holiday not wisely but too well. He called on me, not to beg money, but some ol. verbenæ and rad. calumbæ. He sprinkled the pot with the oil, and packed it up neatly in an empty cigar box. He promised to call later on and pay, and then went forth to sell his "Indian Moth Preventer." Some hours after he called again, paid his scot, and showed me money enough to take him home, thereby saving his character and his tuition. That man will never starve.

Yours truly,
HEDER.

Examination Schedules.

SIR,—I heartily support the remarks contained in your editorial note of October 13 on the above subject. In reading the Minor examination I frequently became disgusted with the vague syllabus of subjects, and, now studying for the Major, I am at the same disadvantage again. We are told, for instance, that "an elementary knowledge of the properties of light, heat, electricity, and magnetism" is required. How is a student to know what a Bloomsbury square examiner considers "elementary"? I have referred to my syllabus of the South Kensington Science and Art department examinations, and am working according to the schedule laid down there, and perhaps when I present myself for examination I shall discover that I ought to have done the advanced schedule as well.

In the syllabus of Jacob Bell scholarship examination, elementary chemistry, pharmacy, and botany" appears, and on all through the Society's examinations this vagueness is to be seen.

I am well aware, sir, that the student who is afraid of learning too much, and who is always anxious to ascertain just what is sufficient for his examination and nothing more, is usually the very man to be plucked—and rightly so too. But, on the other hand, it is unfair not to give him a more complete schedule, for in many instances it may happen that he has worked conscientiously and well, and from his idea of the schedule he feels quite competent to become a candidate for examination; but, alas! he discovers his mistake too late.

I have asked of two recently qualified pharmaceutical

chemists their idea of the Major examination, and what they think a student is expected to know on certain points, but I have failed to secure an intelligible reply. They seem to have had so disjointed a course of study that they are unable to give much information about the examination; in fact, one said, "You will find that a general knowledge of things all round will be all that is required."

I trust the Pharmaceutical Council will soon adopt the same plan as other educational bodies nowadays, by issuing a more complete syllabus of subjects, and thereby securing a greater measure of justice to the student, without in any way injuring the examiner.

Birmingham.

Yours truly,
STUDENT.

Percentage.

SIR,—"Ringing the changes" is a wonderfully transparent means of defrauding—after one has been victimised thereby. The "per cent." question which has arisen in your columns lately brings to my recollection how once upon a time I "rang the changes" to my own loss, and how I afterwards marvelled at my own stupidity. It happened thus: I had a stock of very fine sponges which had lain some time, and which I determined to clear out at reduced prices. I had in my mind that 50 per cent. was the profit originally added, but forgot that it was over cost, which of course made the profit equal to only 33½ per cent. of the return. I did not mean to reduce to below cost, so I took off 40 per cent., and did not notice my mistake until too late. Since then I have been careful to keep in mind only the percentage of profit the return would yield. Perhaps the above hint may save a few of our young friends a like costly experience.

"Jecus" may be right in his statement anent percentage in your issue of October 20, but "Ajax's" *method of estimating* or stating the same seems to me to be the safer one: it is at least the more comprehensive way of dealing with the question. Is it not absurd for a trader to argue that the profits of an undertaking should be estimated or stated without taking into consideration their relative proportion to the main factor in the question, namely, the gross returns? In practice, is it not the rule to regard as two distinct operations the estimating of the profits of a concern and the amount of dividend that can be paid on the capital invested therein?

EDINA. (164/48.)

The Half-Price Postage Closed Letter Company (Limited).

SIR,—With reference to the security offered to the debenture holders (who are restricted to the duly appointed agents) of this company, I beg to point out that the following clause appears on page 7 of our prospectus:—"These debentures are secured by a first charge over all the property of the company of every kind." In the body of the debenture bond itself this is more explicitly defined, as it is worded:—"The company doth hereby charge with such payments (i.e. the due repayment of the principal, interest, and bonus) the whole of the real and other property, capital (called or uncalled), book debts, stock-in-trade, machinery, patents, and effects (both present and future) belonging to or owned by the company."

As the subscribed share capital is in proportion of 10% for every 3% worth of the total amount of debentures to be issued, this item alone should be ample for the full security of the holders of the debentures.

I may also add that I was recently offered, and refused, 5,000% for the British patent for my invention, which is admitted by all competent authorities to be the best one designed, and the only one likely to be able to render a "halfpenny closed letter post" really feasible for the general public. And in retaining the working of my invention (under the Companies Act), with the co-operation of an enterprising firm of advertising agents as managers, I am sanguine enough to believe that the result of such an arrangement will not be less advantageous to myself than if I had sold it out and out.

Although the small sum the agents are required to invest in a debenture, to secure such a valuable agency, is far more

secure than if they were shareholders, yet they will participate in the profits of the business by receiving a liberal bonus in addition to the interest which is secured to them.

Yours truly,
85 Gracechurch Street, HENRY COURT,
London, E.C., October 31. Secretary and Patentee.

Drug Superstition.

SIR,—The following conversation took place the other day in a chemist's shop:—

Customer: Please, sir, I want a pennyworth of powder. I do not know the name of it, but it is a salmon-coloured powder.

Assistant: For what purpose do you want it?

Customer: Please, sir, it is for a neighbour. She wants to burn it in the fire to fetch her husband back, as he has gone to America. My husband left me a short time ago, so I burnt some of this powder, and it brought him back.

S. P. S.

Patent Medicines for Dispensing.

SIR,—According to the interpretation of this Act given in the work written by Mr. Alpe, page 110, it seems that no proprietary preparation which, though liable to stamp duty, has been sold without stamp "for dispensing purposes only" can be retailed as a medicine from the prescription of a medical man "unmixed."

This fact has hitherto not been noticed, and in consequence I, as well as many other dispensers, have frequently dispensed syr. hypophosph. (Fellows), Ziv. , and syr. hydrobromat. (Fletcher), Ziv. , with the ordinary written label, but without the Government stamp, thus rendering ourselves liable to a heavy penalty.

I think it would be well if it was made known to the medical profession, that the members may avoid writing prescriptions for these or similar proprietary articles to be supplied without any admixture, or the medicine would have to be sent out with the Government stamp upon it.

I presume the addition of some colouring ingredient, or any tincture or liquor, would be sufficient to make it constitute a part of the medicine supplied, and thus conform to the requirements of the Act.

I am, sir, yours respectfully,
SODA. (165/21.)

Country Simples.

SIR,—Gorse does not appear ever to have had a place among our official *materia medica*. It is not mentioned in Culpeper's *Pharmacopœia Londinensis*, 1695, nor in any subsequent *Pharmacopœia* or *Herbal* to which I have access, and I have consulted a good many. Salmon does not mention it, nor Lemery, nor Alleyne, nor Brookes; nor have I anything concerning it in my somewhat copious notes from Gerarde and Parkinson. Culpeper, however, includes it in his "English Physitian Enlarged" (1656), wherein he recommends a decoction of the flowers for jaundice, gravel, stone, and to provoke urine. The herb, he says, is "under Mars," is "hot and dry," and "opens obstructions of the liver and spleen." There is nothing here to justify the confidence of Heder's "wise woman" in this ornament of my native hills.

I am, &c.,
Epworth, October 27. C. C. BELL.

SIR,—I have before me a bill of Messrs. T. Christy & Co., in which they recommend "Liq. Ulex Diureticus" and "Ulexine Hydrobromate" in form of pill, dose $\frac{1}{30}$ to $\frac{1}{10}$ gr., and mention Mr. A. W. Gerrard as first extractor of the active principle. From this bill it appears to be used as a diuretic in dropsy. Ulexine is a nerve and muscle and respiratory poison, raising arterial tension and producing diuresis; but the respiratory action being produced by the smallest doses seems to be most important.

23 Blandford Street, W., PROSPER H. MARSDEN,
October 27.

The Cost of Assistants.

SIR,—Your correspondent "Borax" confesses that he has no personal knowledge of the subject on which he writes. May I from experience confirm your estimate.

A competent assistant can command a salary of 100*l.*, and deducting mealtimes, he does not work for his employer more than ten hours a day, as a rule. At 8*d.* per hour this is 6*s.* 8*d.* per day, or 40*s.* per week. Deducting two weeks' holidays, we arrive exactly at the sum stated.

Yours, &c.,
EBOR. (165/32.)

Dispensing Charges.

SIR,—The following was handed in one Sunday to be dispensed and sent by post:—

Potass. carb.	..	..	..	..	gr. iiss.
Ferri sulph.	..	..	..	..	gr. iiss.
℞. pil. Coated.	Mitte 100.	One after each meal.	In bottle.		

I charged 4*s.* 6*d.*; my customer said she paid 1*s.* 9*d.* for them before. I said, "Go and get them there again."

Yours truly,
PHENIX. (165/22.)

[It will be observed, from a paragraph on another page, that a store in Edinburgh sells such pills at 1*s.* per gross, three gross for 2*s.* 6*d.*—ED.]

Marine Algæ.

SIR,—Being interested in the study of above, I should be glad, through your columns, to hear from any collectors who may be located about South and West of England, or any part of Ireland—this, of course, being for purposes of exchange. I have duplicates of some found only on the east coast of Scotland, which might be valuable to collectors elsewhere.

Yours, &c.,
102 High Street, Arbroath. JAMES JACK.

The Pharmacy and the Stores.

SIR,—The weak point in the scheme proposed by Mr. Peck last week is that it is too much like the confidence trick, and that nothing would be more natural than that the stores should follow suit. In fact, our local stores have asked me to join them in getting a parcel of chemicals from Howard. I am afraid that the public will want something more than a parade of special knowledge. Try again, Mr. Peck.

The "Poor Chemist" would give his poor (and rich) brethren the advantage of no licence or duty. But who good to us when an association of eight shareholders—store company—would have the same small advantage?

I am still of opinion that some practical relief may be expected from a clearing up of the law in regard to the sale of proprietary medicines which contain one of the scheduled poisons. It seems to be an established fact that the sale of such poisons must be a personal act for one's own risk and benefit. If we could only get Parliament to pronounce that companies, having no soul to be saved or body to be kicked, are incapable of the personal act of selling poisons, great advance would be made in the direction of restricting the sale of such articles as chlorodyne, Kay's linseed, kalydo, &c., to registered chemists. This is the ground on which always argue when challenged as to free trade in drugs and "patents." I believe it to be the only true basis for educating the public, and most men see the injustice of the present state of things, although they are still more influenced in their purchasing by the "argumentum ad breches-pocketum."

Yours truly,
HEDER. (165/69.)

"Heder" Jokes.

SIR,—Your correspondent "T. B." (Buxton Dispensing) reminds me of a joke against the maker of a well-known nostrum: "Prepared from sound ripe fruit—very far from it. E no's what he means."

Yours truly,
HEDER. (163/18.)

N.B.—Not original!

Its Jubilee.

SIR,—This is not a patent medicine, but it is cut from a Newcastle paper for the year 1833—fifty years ago. It goes back to the time when our whale fisheries supplied the best oil for drawing-room lamps—long before the paraffin, petroleum, or electric lamp. Few of our chemists nowadays would know what this oil was, so I thought it might be interesting, and send it.

Yours, &c.,

Low Fell, Gateshead, October 25.

R. SHEEL.

ON SALE.

Bottle Nose Oil (for Drawing-room Lamps).—Apply to

E. WILSON CHALLONER,

Grey Street, Newcastle.

Old Medicines.

SIR,—I enclose extract from an original pamphlet of Dr. Sermon's famous pills, dated 1669. Although not mentioned in Mr. Alpe's book, I consider the description of their virtues and the prices of sufficient interest to ask you to insert it for the perusal of your subscribers.

Yours truly,

EXONIENSIS. (68/165.)

"Sermon's wonderful cathartique and diuretique pills cure dropsie and scurvie, and all excrementitious humours, pains in the head, breast, and stomach, shortness of breath, wind, colic, and Iliac passion (which is a greivous pain in the small guts). It purgeth all superfluous humidity from the womb, oftimes the cause of non-conception, opens obstruction of the Liver and spleen, cleanseth the Blood, Souels, and dispelleth all putrefaction found offending, most excellent to prevent all infectious distempers, and is the only medicine to purge the Veins; it provokes Urine, hinders the generation of gravel and stone in the kidneys, strengthens the vessels spermatique, and are well known to help gonorrhoea of all kinds.—Prepared only by William Sermon, Doctor of Physic, and one of his Majesty's physicians in ordinary, and sealed with my own seal. 20 pills, 4s.; 40 pills, 8s.; 60 pills, 2s. Sold by Edward Thomas, at the 'Adam and Eve,' Little Britain. 1669."

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

Acid Lactic.

Replying to "Grateful," a correspondent states that acid lactic is always dispensed in the West-end when dilute is not specified.

An Explosive Mixture.

SIR,—Last week I had occasion to make up the following mixture:—

Magnes. sulphatis	3j.
Potass. bicarb.	3j.
Tinct. hyoseyami	3j.
Spt. aeth. nit.	5j.
Syrupi simplicii	3ss.
Aq. camph. ad	3viij.

M. Ft. mist. ap. 3j. ter die ex aqua.

There was, of course, some effervescing at first, and eventually the mixture was sent out nice and bright.

Two days after I received notice the bottle had burst. I therefore made another up, this time omitting the mag. sulph., and sent this out, but the following day I learnt that this bottle had also burst. I again set to work, and this time made the mixture up to 16 fl. oz. with water, but after standing a day or two, being shaken up occasionally, again the bottle burst.

Can you suggest what is the cause of this? My drugs were of the best quality, and everything appeared to be right.

Perhaps some of your readers have met with the same difficulty; if so, I should like to know how it can be overcome.

Yours faithfully,

CASCARA. (166/53.)

[The bursting is due to liberated carbonic acid gas. In aqueous solutions bicarbonate of potash slowly gives off the gas, but the principal disturbing element in this case is the spirit of nitrous ether. This rapidly decomposes in presence of water, with the formation of nitrous and acetic acids, which react with the bicarbonate. See "The Art of Dispensing," pp. 41 and 131.]

Ferric Chloride and Mucilage.

SIR,—The following prescription was handed in here one day last week. Will you kindly say what is the best method of dispensing the same?—

Tinct. ferri perchlor.	5ij.
Mucilaginis	3iijss.
Acid. carbolie.	gr. xij.
Aqua	3ij.

M. Ft. inject. Nocte manequa uten l.

Yours truly,

Manchester, October 22.

T. R. (160/66.)

[(1) Dissolve the carbolie acid in 1 oz. of water and add the tincture to it. (2) Dilute the mucilage with the remainder of the water. Place No. 1 in a mortar and add No. 2 gradually to it, stirring assiduously. This gives an apparently thinner mixture than when No. 1 is added to No. 2. There is no special difficulty here, however.—ED.]

Calcium Chloride and Ferrous Iodide.

SIR,—Can you please suggest what has occurred in the following mixture, which was dispensed a few days ago and returned to-day with a reddish-brown precipitate, looking very much like ferric hydrate?—

Liq. calcii chloridi	3iv.
Syr. ferri iodid.	3iij.
Aq. ad	3vj.

M.

Yours truly,

STUDENT. (162/36.)

[So far we cannot yet suggest, as a precipitate has not formed in the mixture which we have dispensed. We place the prescription before our readers for experiment.—ED.]

What is it?

Lotion. perchlor. hydrarg. (Hart's) .. 3ij.

Sig.: 3ss. to a pint of water.

For a lotion. Poison.

What strength is the above made? I thought to make it such a strength as that when diluted it would equal a $\frac{1}{1000}$ solution. Is this correct, or is there a special strength for Hart's lotion?

Yours truly,

SUBLIMATE. (166/4.)

159/60. *Subscriber*.—(1) As the copy of your prescription is not written on white paper, we cannot reproduce it for the opinion of our readers. The correct rendering seems to be:—

Iodoform	3j.
Pu. zinci ox.	3j.
Ft. pulv. As directed.	

The second ingredient might also be rendered "Pu. lin. saponis," which is unlikely. (2) We quote from "The Art of Dispensing," page 13, in reply to your second query: "It should be understood that 3 means an apothecaries' or troy ounce of 480 grains, while 'oz.' means an avoirdupois ounce of 437½ grains." (3) See our educational number, September 22, regarding preparation for the Minor.

LEGAL QUERIES.

16/163. *Enquirer*.—The travellers who do not stamp their receipts (if the amounts paid are 40s. or over) are liable to a penalty. The stamp on the cheque by which they are paid does not absolve them.

4/164. *D.*—The fact that you were in the employment of a manufacturing chemist before 1863 would not entitle you to registration as a chemist and druggist. You would only have such a right if you could bring evidence showing you were in business for yourself as a chemist and druggist before that date.

26/165. *Justitia* states an interesting case to us at some length, the particulars of which are briefly as follows:—He proposed to sell his business, and put it in the hands of an agent. A customer was found, terms were arranged, and deposit was paid. The vendor and purchaser, however, subsequently agreed to void the transaction. *Justitia* then arranged to enter into partnership with another person, and he employed the same agent as his valuer. The affair is now concluded, and the valuer sends in his account. For the sale of the business he charges 5 per cent. on the first 200%, and 2½ per cent. beyond; for the valuation he charges at the same rate. As the amounts are exactly the same, we presume the work of valuation was only done once; and though it may be that the valuer has a technical claim for the double payment, we cannot think such a claim is an altogether reasonable one. Above these charges, however, he puts in a claim for 10*l.* 10*s.* as "retainer to value for you against Mr. —." This, as far as we are aware, is a charge altogether unjustifiable, and we do not think it would be possible to prove custom or service in support of it. We may say, too, that the usual rate for valuation is 5 per cent. on the first 100% (not 200%, as here charged) and 2½ per cent. beyond. We should consider one valuation fee (at the rate just mentioned), half the sale fee, the travelling expenses, and the stamp would be a fair account, and this we would recommend our correspondent to offer the agent. If he does not agree, and will not consent to arbitration, the case seems to us good enough to contest.

11/167. *Country Chemist*.—Sulphate of copper is not a scheduled poison, therefore it is not illegal for ironmongers to sell it.

25/167. *A. F. Z.*—You must take a wine retailer's "off" license, 2*l.* 10*s.* a year (can be taken for a quarter, half, or three quarters of a year). This will allow you to sell sweets (British wines) without extra licence. A justice's certificate is required.

MISCELLANEOUS INQUIRIES.

A large number of correspondents ask us for formulæ which have already been published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4*d.* each.

Sauce.—A formula for a good and palatable sauce is given on page 726, December 3, 1887. (163/23. *W. T. B.*)

Cement for Indiarubber.—See page 113, January 23, 1883, and page 334, March 10, 1883. (*Derby*.)

Poultry Food.—May 5, 1883, page 602, December 24, 1887, page 823. (163/14. *Crum.*)

Liquid Dentifrice.—See page 233, February 18, 1888. Numerous other formulæ are given in back volumes. (158/61. *Dens.*)

161/59. *Nemo*.—A good remedy for Scurf or Dandruff of the scalp is the following ointment, which has been recommended by Mr. Startin, the hair specialist, his formula being slightly amended pharmaceutically:—

Hydrarg. oxid. flav.	..	..	gr. x.
Hydrarg. ammoniat.	..	..	gr. iv.
Ung. camphoræ	..	..	3 <i>ss.</i>
Ung. simplicis	..	..	3 <i>ss.</i>
Ol. neroli	..	..	gtt. iiij.
Otto rose	..	..	gtt. ij.

fiat unguentum s. a. To be used as a pomade every morning, the hair afterwards being well brushed.

161/71. *W. H. J.*—Thanks for your note. The stove mentioned has already been recommended.

156/40. *Young Wales* wishes "a few hints as to the best experiments to perform during a one hour's Lecture on Chemistry." As he does not tell us what the lecture is to be, this is equivalent to our giving him an outline of that also. Perhaps the following will be useful; it is intended to bring in as many striking experiments as possible, and requires careful preparation beforehand, and a complete rehearsal of all the experimental work.

Introductory: Explain what chemistry is, speak briefly of the elements, their number, and the properties of a few typical ones, such as iron, sulphur, copper, phosphorus, sodium, amongst solids; bromine and mercury amongst liquids; and hydrogen, oxygen, and chlorine, amongst gases. Exhibit specimens of these.

1. Describe a compound and how formed, and demonstrate the difference between a compound and a mixture. Typical compounds: common salt, sugar, red oxide of mercury. Explain how the last named is made, and show that by heating it is split up into oxygen and mercury. (Heat 10 grains or so in a dry test tube.) Gunpowder is a typical mixture. Before the lecture its component parts may be separated, the sulphur with carbon bisulphide, and the nitre with water. Show these with the charcoal.

2. The red precipitate experiment will have given an opportunity of showing that oxygen is a supporter of combustion, for a glowing match bursts out into flame when placed in the test-tube. Now explain that most elements are permanent in the air, and give examples of those that are not—sodium, phosphorus, &c. Some oxidise readily when the temperature is raised—(burn a piece of magnesium ribbon).

3. Take the last experiment as an example of chemical combination, explain briefly what that is, and show that nothing is lost, although character apparently destroyed. The burnt magnesium ribbon is heavier than before by the amount of oxygen with which it has combined. $Mg(24) + O(16) = MgO(40)$. Take this as the basis of a few explanatory remarks on how elements exist, viz., as molecules composed of atoms, and that the atoms of different elements have different weights. [A half-ounce bottle of bromine and the same of mercury, both securely closed, passed round the room, will demonstrate this sufficiently; but pieces of aluminium and lead of the same size would be better.]

4. As further examples of chemical combination, burn small pieces of charcoal, sulphur, phosphorus, and fine iron wire in oxygen. Point out the great energy of combustion in this case as compared with air.

5. The last experiments may be taken as the basis of a few remarks upon the atmosphere. Mention its component parts, the use of the nitrogen, and the origin of the carbonic acid gas. (Show that by breathing for a few minutes through a tube into lime water the carbonic acid from the lungs combines with the lime.)

6. Explain that carbonic acid gas is not a supporter of combustion, therefore not of life. (Place a burning taper in a jar of the gas.) Give other examples of the same kind—hydrogen for instance.

7. Show that a mixture of equal parts of hydrogen and oxygen in a soda-water bottle explode with violence when lighted. Explain this, and take the result as the basis of

8. A few remarks on water. Show that sodium placed on the surface of some water combines with one part and liberates the other (hydrogen, which ignites). Explain the

nature of the substance which is formed— NaHO , an alkali. Demonstrate the presence of the latter in the water by adding to it two or three drops of solution of phenolphthalein, which does not give the crimson solution with distilled water.

9. Explain what is meant by an acid and an alkali or base. Show the effect of potash or soda on litmus tincture and water, and an acid (hydrochloric) on a separate vessel of the same. Mix one solution with the other until the colour is discharged. Explain. Describe what is meant by a salt, and show how ammonium chloride is formed by the combination of two gases (liquor ammonia and strong hydrochloric acid).

10. Finally illustrate chemical change in another fashion—(a) $\text{HgCl}_2 + \text{KI}$, (b) $\text{FeSO}_4 + \text{K}_2\text{FeCy}_6$, (c) $\text{PbAc}_2 + \text{K}_2\text{CrO}_4$, and (d) solution of $\text{Bi}(\text{NO}_3)_3$ poured into water. Peroration.

We may repeat that to give the lecture effectively and successfully you must have the subject well up. You may write out the lecture, but we strongly recommend you not to attempt to read it; it must be delivered either from memory or from notes. Be sure of your experiments by performing them successfully beforehand.

167/30. *C. E. L.*—Bates's Saccharometer.—The scale of this hydrometer is numbered downwards from 0 to 30, and each division floating above the surface of the liquid indicates the one-thousandth part of the specific gravity of distilled water at 60°F . The hydrometer has five weights, the first of which, when the instrument floats at zero, represents 5 units of gravity below water—i.e., sp. gr. 0.995. The instrument with the second weight attached is adjusted to float at zero in distilled water, and the remaining three weights represent 30, 60, and 90 units of gravity above water, or sp. gr. 1.030, 1.060, and 1.090, when they are attached to the instrument. The graduations of the stem floating above the surface of the liquid are reckoned in addition. Thus it is obvious that the highest gravity which the instrument can determine (supposing you attached weights 3, 4, and 5) is 1.210, so that it is unsuitable for Pharmacopoeial syrups. The instrument we describe is the one used by the Inland Revenue officers.

160/68. *Country Bumpkin*.—The permanganate and Nessler's tests are good rough indications of the purity of water. If the permanganate is not reduced and the Nessler's solution gives no precipitate, the inference is that the water is not contaminated with organic matter. In applying the latter test precipitation generally takes place within a minute.

160/59. *J. H. B.*—(1) Worm Ball for Horses.—Tartar emetic, 5j.; ginger, 3j.; linseed meal and treacle, of each enough to form a ball. To be given in the morning an hour before feeding. (2) To refill the wheel barometer with mercury all that is required is a little dexterous shaking and careful tapping of the top of the tube. It takes a little time, as only a few grains of mercury can be got round the bend each time.

160/46. *G. Graham*.—Messrs. Evans, Sons & Co. and Southall Brothers and Barclay send out collections of materia medica specimens. Please apply to them for particulars.

160/35. *J. K.*—Invisible Ink.—Solution of chloride of cobalt is generally used.

162/41. *Inquirer* (Edinburgh).—Salicylic acid, 2 grains to 1 oz., may be used for preserving essence of coffee. This, along with the sugar, will serve the purpose.

162/25. *Potash*.—We have described the process for Bleaching Sponges many times. As carried out by the principal sponge merchants it is, briefly, as follows:—The sponges, shaken free from sand, are first immersed in a bath of permanganate of potash (about 1 oz. to 1 gallon) for ten

minutes or so, being worked about all the time with a stick. Then wash in a bath of plain water, and transfer to another bath composed of dilute sulphuric acid (1 in 6 of water). Work the sponges in this until the brown colour (due to deposited oxide of manganese) disappears. Again wash in water and finally "colour" in a bath composed of annatto, 1 oz.; pearl ash, 8 oz.; water, 6 gallons.

162/34. *J. H.*—A quinine and iron tonic made with citrate of iron and quinine, a little citric acid, tincture of fresh orange peel, and chloroform water, keeps well. You will find numerous formulæ in back numbers.

162/57. *Hermes*.—Putty powder is the basis of the popular American Nail Powders. It may be mixed with powder pumice and precipitated chalk, coloured and perfumed.

163/44. *Enquirer* (Leamington).—Steel-facing Copper.—This is done by electro-deposition. The solution used is made by dissolving iron wire in hydrochloric acid to form a neutral solution, and for every 58 grains of iron dissolved add 53 grains of ammonium chloride. Another formula is ferrocyanide of potash, 5 lbs.; Rochelle salts, 10 lbs.; water, 20 gallons. Dissolve and add persulphate of iron, $1\frac{1}{2}$ lb. (dissolved in water); and to redissolve the Prussian blue add solution of soda gradually, and with constant stirring. Use either of these with a battery in the ordinary way for electro-plating.

163/33. *B. & S.*—We have not published the formula, but it is possible that you will find some remarks on the subject if you search back numbers.

164/20. *F. W.*—The 10-volume peroxide of hydrogen is used for bleaching the hair. The hair must be quite free from grease, and the peroxide should be applied to it with a sponge or a tooth-brush.

Post-card Competition.—In giving the results of this competition, one plan (corner shop, page 542) was stated to be by Mr. J. Fernie, instead of Mr. James Petric.

165/35. *Reseda* has lately sold some effervescent citrate of magnesia, by a doctor's order, to be dissolved in water and used as a gargle. The patient said it was for a relaxed throat. Can anyone tell him whether it has been used or recommended before for that purpose?

52/40. *P. H. B.*—The Bog Oak Marking Ink which you send is powdered nigrosin. This is the basis of some marking inks which do not require heating. The principal difficulty experienced in the manufacture of such inks is to secure a solution of the nigrosin which does not undergo change, and it is for that reason that two solutions are sometimes given, as in the case of jetoline and in the following formula:—

(1)		Parts
Crystallised chloride of copper	..	8.52
Chloride of sodium	..	10.65
" ammonium	..	5.35
Water	..	60.00
(2)		
Aniline hydrochlorate	..	20.00
Distilled water	..	30.00
Mucilage of acacia	..	20.00
Glycerine	..	10.00

Four parts of No. 2 are to be mixed with 1 part of No. 1 when the writing is required to be done. This is practically a solution of nigrosin. The nigrosin itself may be dissolved in a mixture of spirit, 1 part; water, 2 parts; and glycerine, 1 part, with the addition of 1 per cent. of strong solution of ammonia; but the permanency of this solution cannot be

guaranteed, yet it gives a permanent mark on linen when freshly made. You do not say how the bog-oak ink was made.

155/72. *D. T. E.*—The preparation is apparently an alkaline solution of the phenol distillate of coal tar. We do not make analyses of such preparations.

151/55. *W. Gregory.*—Your surmise appears to be correct. The farinaceous basis is of leguminous origin.

154/68. *Belfast.*—You have not sent sufficient of the neuralgic powder for proper analysis. It contains bicarbonate of soda (mainly), with an alkaloid and a pungent principle. Send us about 30 grains of the powder, and give more particulars regarding it.

156/11. *Benoni.*—Try the following formula for the Cough Mixture. It will yield a preparation very similar to the one sent :—

Sp. ætheris nitrosi	..	..	..	3iij.
Liquor. toluanti	..	..	..	5i.
Tinct. camphor. comp.	..	..	..	5ij.
Oxymel. scilicet ad.	..	..	..	5iv.

M. Dose : A teaspoonful for an adult.

155/73. *Dormar.*—The Artists' Etching Ink appears to be a solution of nigrosin in weak ammonia water with about 5 per cent. of glycerine and 10 per cent. of mucilage. Make a few experiments until you arrive at the proper strength; 30 grains of nigrosin to the ounce should give a sufficiently intense colour.

134/24. *Spero.*—The white precipitate in the Furniture Polish which you send us is oxychloride of antimony. The polish seems to be made from such a formula as the following :—

Linseed oil	..	..	..	..	Oz.
Turpentine	..	..	..	..	10
Alkanet	..	..	..	..	2
	..	..	..	..	1

Digest for a day or two, strain, and add to the following previously mixed—

Butyr. of antimony	..	..	..	..	Oz.
Water	..	..	..	..	2
Dilute acetic acid	..	..	..	..	4
Methylated spirit	..	..	..	..	4
Solution of ammonia	..	..	..	..	1

155/74. *Cymro.*—The subject is one upon which the analyst should have been consulted. The composition of the sample, so far as the silica, alumina, and iron are concerned, closely approximates to the average for fullers' earth. After the earth is heated in an oven it should be treated with water. Has this been done?

165/59. *Monogram.*—See reply to "P. H. B.," which meets your case.

163/52. *R. T. & Co.*—Match and Vesta Tips are made of a composition such as the following:—Soak 4 parts of fine glue in water until soft, then heat in 8 parts of water until a perfectly clear solution is formed; remove the scum and incorporate 3 parts of amorphous phosphorus, stirring until an emulsion is formed. Then add 8 parts of chlorate of potash and 6 parts of powdered glass, with sufficient colouring matter to give the desired tint. Red lead or vermilion may be used for the red colour, and Armenian bole or black oxide of manganese for the brown.

36/54. *Tailless* tells us of a handsome thoroughbred Irish mare which cost 160 guineas in Ireland eight months ago. This mare has an incurable habit of rubbing her tail against

everything rough, and as a consequence she has rubbed nearly all the hair off, thus disfiguring herself to a great degree. No doubt the irritation must be extreme, for nothing appears to relieve it. Her tail, which is short, is now nearly bare of hair. She eats well, and is as lively as can be. Along her sides by looking carefully can be discerned under the skin small lumps or kernels. These do not appear to be sore, nor do they show any signs of coming to a head. With regard to the tail, the skin has not been broken by the rubbing, neither is there any eruption where the hair has been rubbed off. They have physicked the animal, and tried carbolic acid ointments, and lotions, as well as lead lotions, but all to no purpose.

[No matter how much physic you have already given, the mare has not had enough all the while the small lumps or kernels can be discerned under the skin. She probably has more corn than she can digest. Carefully examine the dung, and see if whole oats are passed, not mistaking the husks by being afraid to soil your fingers. See if the grinders want filing. Many horses take up this habit from the presence of round worms in the rectum, and we have known it to be completely cured by an injection of salt or carbolic acid, and in more than one case by nothing more than the introduction of two or three fingers and a piece of lard into the rectum. It will be quite safe, and probably effectual, to use two or three such applications of Ung. hyd. mit. Also apply mustard as a thin paste to the tail, and fear not if it blisters a little. We have seen all these remedies succeed at one-time or other, but pin our faith on Ung. hyd. mit.]

Acid. carbolic	..	..	..	..	3j.
Glycerin.	..	..	..	..	5ss.
Aq. ad	..	..	..	..	Oj.

Pro injectio. Repete omni nocte. Temperature of 100° Fahr.

Soliii chlor.	..	..	..	..	3j.
Aq.	..	..	..	..	Oij.

Pro injectio. Omni nocte. Temperature of 100° Fahr.

161/46. *Vet.*—We should read your formula for Horse Powders thus:—Hemp seed, 2 oz.; fenugreek, 2 oz.; hemlock seed, 2 oz.; sulphur, 2 oz.; cream of tartar, 2 oz. Mix. Dose—3ss. in the mash every night.

161/55. *Ammon. Brom.*—Salt is the best preservative of mushroom and walnut ketchups. The addition of either boric or salicylic acid is not desirable. The latter may be used in the proportion of one grain per ounce.

165/14. *Desdichado.*—(1) We append a formula for Blue-Light, but wish you to understand that it is illegal to compound such articles in a chemist's shop, or any other premises which are not registered for the manufacture of explosives. *Light blue:* sulphur, 16 parts; burnt alum, 23 parts; chlorate of potash, 61 parts. Mix. *Dark blue:* sulphate of copper, 7 parts; sulphur, 24 parts; chlorate of potash, 69 parts. Mix. (2) A little aniline violet is a good and safe Colour for Syrup of Violets.

165/72. *G. T. S.*—(1) Try the method given above in reference to bog oak ink. We know that nigrosin has been tried over and over again as a black ink for the graph, but we have not yet heard of a decided success with it. (2) We shall examine the varnish and report when possible.

We print this query by *Saccharin* (165/45) as we have received it :—"Can you tell us how to preserve Liebig's Extract Meat, 10 grains, in 2 oz. water? What should we use, 10 grains to 2 oz. water—say 10 grains extract to 2 oz. water?"

159/61. *Durham.*—See "The Worship of Bacchus" (Band of Hope Union, 4 Ludgate Hill, E.C. 2d. and 1s.) for information regarding temperance experiments.

165/9. *Cremona.*—You will find some interesting reading regarding violin varnish in the correspondence columns of our issues for June 9, 16, and 23, 1888.

SQUIRE'S

This preparation is composed of one of the simplest and most efficient laxatives known, combined with other ingredients which completely mask the nauseous taste of the Cascara.

Not exciting by its action the peristaltic movement of the bowel, it does not

ELIXIR OF

leave behind it that tendency to constipation which follows the use of most aperients

It is a laxative, not a purgative.

Sold in Bottles, retail 2s. 6d. and 4s.

CASCARA.

SQUIRE & SONS

Her Majesty's Chemists,

413 OXFORD STREET, LONDON, W.

SOLE IMPORTERS

OF

APOLLINARIS WATER,

FRIEDRICHSHALL WATER,

HUNGARIAN APERIENT WATER,

DIAMOND MARK.

THE APOLLINARIS CO., LIMITED,

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MANUFACTURING CHEMISTS,

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SQUIRREL BRAND.

(ESTABLISHED A.D. 1755).

SELECTED DRUGS & PURE CHEMICALS

Preparations of the British and
other Pharmacopœias.

Preparations of the B. P. C. Un-
official Formulary.

Lozenges of the British and Throat
Hospital Pharmacopœias.

Pills — Pearl-Coated or Gelatine-
coated.

CAPSULES CASCARA SAGRADA AND OTHER CAPSULES.

DRUGGISTS' SUNDRIES.

Tinctures and Aethereal Preparations supplied in Bond for
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SOLE PROPRIETORS OF

DALMAHOY'S EAU DE MENTE PECTORALE

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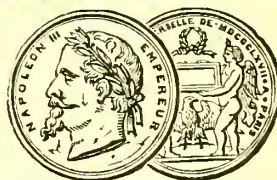
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Acetates of Soda & Potash.
Acids, pure.
Æthers, pure & methylated.
Antimony preparations.
Benzoic Acid & Benzoates.
Bicarbonate of Potash.
Bicarbonate of Soda (Howards').
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Borax & Boracic Acid.
Bromides of the Alkalies.
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Corrosive Sublimate.
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(GOLD AND SILVER BRAND)

QUININE FACTORY AUERBACH

(DR. SEYFERTH).

*Certified by Professor Fresenius, of Wiesbaden, as
equal to the best preparations of other marks.***DEUTSCHE GOLD AND SILBER
SCHEIDE ANSTALT**

(VORMALS ROSSLER),

FRANKFORT-ON-MAINE.CYANIDE OF POTASSIUM,
IODIDE OF POTASSIUM,
BROMIDE OF POTASSIUM,
NITRATE OF SILVER,
CHLORIDE OF GOLD,
SULPHOCYANIDE OF BARIUM,IRON Reduced by HYDROGEN,
TARTARIC ACID,
HYDROCHINON,
STRONTIA,
MAGNESIA, and ALL OTHER
CHEMICALS for
PHOTOGRAPHIC and PHARMACEUTICAL PURPOSES, of the
Best Quality.**Sole Agents—OSCAR ANDREAE & CO.**

26 Great Tower Street, LONDON, E.C.

**M.K.B.****REGISTERED.****PURE WHITE
POWDERED CREAM OF TARTAR
GUARANTEED 99% BITARTRATE OF POTASH.**

The quality of ordinary French Cream of Tartar being so uncertain—80 % to 90 %—the advantage to consumers of a regular article, guaranteed 99 %, is very obvious.
8 lbs. of our 99 % will do the work of 10 lbs. ordinary French Cream of Tartar.

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MANUFACTURING CHEMISTS,

WARWICK, ENGLAND,

RECOMMEND THEIR

PURE PREPARATIONS OF PEPSINE

Guaranteed to answer the tests of all authorised authorities, and superior to any made, whilst the price is considerably lower.

DEAR SIR,

We have received a supply of your "Pure Pepsine Porci," and find that 20 grains dissolve (or digest) three hundred and sixty grains of dry fibrin. This result we consider to be very satisfactory, and we can therefore confidently recommend your preparation.

To Messrs. CLARIDGE & SON, Warwick.

Yours faithfully

Also eulogised by Dr. LETHBY in his Lecture before the Society of Arts in London.

BIRMINGHAM, November 23rd, 1887.

SOUTHALL, SON & DYMOND.

PRICES—Pepsine Porci Pur., 2s. per 1 oz.; Pepsine, B.P. guaranteed, 2s. per 1 oz. bottle; Pepsine, best English (Amylated), 30 % pur., 10s. per lb.

SPECIAL CHARACTERISTICS.—Superior activity in digestive power, purity, freedom from objectionable odour, and good keeping properties have secured for 25 years the confidence and preference for Messrs. CLARIDGE'S Preparations by the leading London houses.

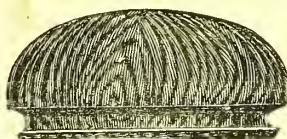
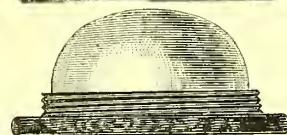
Order direct, or through any London firm or Shipping house. Samples free. Special quotations and discount for 25 ounces and upwards.

**HAWLEY'S
CASCARA SAGRADA
CAPSULES.**

The nauseous taste of this drug is effectually covered by enclosing a Concentrated Fluid Extract in Gelatine.

The boxes contain 24 Capsules in each, are neatly got up, and of a convenient size and shape for the pocket.

Price—1/ retail, 7/ dozen; 6 dozen, 6/6 dozen.

**MENTHOL
DOMES.**

Pure Menthol, no admixture. In dome-shape cases, as accompanying figure, Boxwood, Ebony, and Vegetable Ivory. Also in other shapes. Low prices; see Drug List.

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WYLEYS & CO.

MANUFACTURING CHEMISTS AND DRUG GRINDERS.

WAREHOUSES, LABORATORIES, & DRUG MILLS, COVENTRY.

COATED PILLS.

Estimates for making and coating according to private recipes will be forwarded on application.

Our pill department is now a most important branch of our business; and we have a large staff exclusively engaged in pill making. All mixing, cutting, rounding, picking, &c., is accomplished with the aid of steam machinery, by which means we attain a uniformity in composition and size such as cannot be equalled by hand-work.

WYLEYS' PEARL-COATED PILLS.

Our coating is well known as possessed of excellent keeping qualities, being thin in substance, soluble, and well adapted to retain the essential oils contained in the pill masses.

For finish, and general good appearance, they will compare most favourably with any in the market.

WYLEYS' GELATINE-COATED OVAL PILLS.

The only oval gelatine-coated pills of English manufacture in the market. The distinctive colours of the ingredients contained within them show through the transparent covering, and our gelatine-coated pills are admirably adapted for the elegant administration of single drugs, as well as compound pill masses.

Our "Prices Current" contains an extensive list of coated pills, showing formulae and prices, together with a number of TESTIMONIALS.

PILL VASES (GOLD LABELLED).

We stock handsome vases, adapted for Soluble Pearl or Gelatine-coated Pills, and labelled according to the following varieties, "Liver," "Female," "Castor Oil," "Aperient," "Compound Rhubarb," Digestive," "Rheumatic," "Cough."

PRICES.

Small, to hold 2 to 3 gross .. 3/6 each
Large, to hold 7 to 8 gross .. 5/-
These may be had filled according to any of the numbers given in our list, or with special pills to private formulae. As examples of prices, we quote:—

	Pearl-coated.	Oval Gelatine.
No. 211 (Liver) .. per gross..	1/8	2/2
" 258 (Liver) .. "	1/4	1/10
" 29 (Aperient) .. "	10d.	1/4
" 537 (Digestive) .. "	1/4	1/10
" 480 (Female) .. "	2/-	2/6
" 623 (Female) .. "	1/3	1/9
" 80 (Rheumatic) .. "	2/-	2/6
" 619 (Cough) .. "	1/6	2/-

Special quotations for large quantities.

COMPRESSED PELLETS.

We are offering Glass-topped Boxes, suitable for display on the counter, and containing two dozen heart-shaped bottles, with white metal screw caps, and filled with pellets (assorted) at 6/ per box net cash.

List of Pellets supplied.

Ammonium Chloride.	Sodium Bicarbonate.
Potassium Chlorate.	Sal Prunella.
Potassium Chlorate and Borax.	Soda Mints.
Potassium Bicarbonate.	Voice.

Also similar Glass-topped Boxes containing 3 doz. Metallic Boxes, filled with an assortment of pellets, as above, at 7/6 per box net cash.

For prices in bulk, see "Prices Current."

GLYCERINE SUPPOSITORIES

(WYLEYS),

FOR USE IN CONSTIPATION.

AS FIRST INTRODUCED BY OURSELVES.

Glycerine administered in the form of a Suppository acts equally as well as when injected by means of a special syringe, whilst the advantage of the Suppository form is obvious.

We prepare these Suppositories in two sizes, which are supplied in slide boxes, each containing one dozen.

Ordinary (Pessary size) .. 1/6 dozen.
Small, for Children.. .. 9d. "

MALTED FOOD FOR INFANTS & INVALIDS.

In addition to sending out the above article in bulk, we are supplying it in Half-pound and One Pound Cardboard Cases, ATTRACTIVE IN APPEARANCE, and labelled without Name and Address.

PRICES.—In Bulk, 42/- per cwt.;
Half-pound Packages, 4/- per doz.;
One Pound Packages, 7/6 (subject to Patent Medicine Discount).

Concentrated Infusions and Decoctions, Granular Effervescent Preparations, Extracts, Spt. Ether. Nit., Spt. Ammon. Arom., Medicated Suppositories, Pessaries, Bougies, and Plaisters, Medico-Pharmaceutical Appliances, and all New Preparations and Medical Specialities.

THE DURAPLASTIC COATED HORSE BALL.

(PATENTED. No. 15215.)

*Extract from "The Veterinary Journal,"
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Messrs. Wyleys & Co. have introduced a description of horse ball which appears to possess several notable advantages which should commend it to veterinary surgeons. These advantages are related to its shape, coating, and the solubility of this coating. The shape is exactly that of an elongated conical shot, which gives it the fewest possible points of resistance to entering the pharynx and oesophagus, enabling it to pass easily into the stomach, and reducing to a minimum the possibility of accident. The coating is on Fletcher's patent principle, and being absolutely air-tight, the therapeutic properties of the remedies it envelopes remain unimpaired for any length of time; while the ball is kept sufficiently firm to retain its shape, and is yet pliant enough to adapt itself to the fingers during administration. In addition to this, the coating is so soluble that it dissolves in less than two minutes at the normal temperature of the viscera, whereby the prompt action of the medicament is ensured, a point of much importance in urgent cases. The elegance and form of the bolus is in striking contrast to the old-fashioned paper-covered article, with its flat angular ends, and its too hard or too soft consistency.

No. 4.—Alterative Balls ..	24/ per gross
" 5.—Astringent Balls ..	24/ "
" 12.—Condition Balls ..	24/ "
" 6.—Cordial Balls ..	24/ "
" 7.—Cough Balls ..	24/ "
" 15.—Cough Balls ..	27/ "
" 17.—Cough Balls ..	27/ "
" 8.—Diuretic Balls ..	24/ "
" 9.—Fever Balls ..	24/ "
" 1.—Physic Balls ..	24/ "
" 2.—Physic Balls ..	30/ "
" 3.—Physic Balls ..	36/ "
" 18.—Physic Balls ..	42/ "
" 19.—Physic Balls ..	48/ "
" 15.—Stimulating Balls ..	24/ "
" 10.—Tonic Balls ..	24/ "
" 11.—Tonic Balls ..	20/ "
" 13.—Worm Balls ..	30/ "
" 14.—Worm Balls ..	60/ "

PRIVATE FORMULÆ.—WYLEYS & CO. will be glad to prepare Patent Duraplastic Balls from private recipes. Arrangements can also be made to have the name of the Chemist upon each Ball if desired upon orders of 2 gross of assorted Balls.

All Balls are packed in boxes of one dozen.
Samples forwarded free on application.



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As Prepared by the Discoverer, SIR JAMES MURRAY, M.D.

FOR OVER 60 YEARS IN USE AS AN EXCELLENT REMEDY FOR ALL DISEASES OF THE STOMACH AND LIVER.

In Summer time, and in warm climates, it is invaluable, as it cools the Blood and improves the system generally.

It is the only known Drug which cures that most unpleasant of all maladies, viz., a HEADACHE. In cases of Gout and Indigestion it is indispensable.

AND IN THE NURSERY IT IS INVALUABLE. SPOKEN OF MOST HIGHLY BY ALL THE PROFESSION.

Sold by all respectable Chemists, in Large sized Bottles (the 1s. size containing nearly Double the Quantity usually sold at that price), at 1s., 2s. 6d., and 3s. 6d. each. Also in Winchester Quarts for Dispensary and Hospital use.

CAUTION.—Observe the SIGNATURE of the Inventor on EVERY LABEL.

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In **COUGHS, ASTHMA, BRONCHITIS, INFLUENZA, &c.**, its effects are truly wonderful, immediately relieving the tightness of the Chest, allaying irritation of the Throat, promoting Expectoration, and speedily and effectually subduing the Cough.

It soothes the weary aching of **CONSUMPTION**, relieves the harassing Cough, and often prevents those sleepless nights so trying to the sufferer.

In **CHOLERA, DIARRHŒA, DYSENTERY, &c.**, it has proved itself a most valuable specific, quickly relieving the pain and spasms, and seldom failing to check the disease; for which property, as well as for its value in Sea Sickness (for which it is the best remedy known) it should be an indispensable article in every emigrant's outfit.

TESTIMONIALS.

"Superior to every other I have tried."
F. H. GREEN, M.R.O.S.,
Rochdale Dispensary.

"Peculiarly serviceable in Bronchial, Spasmodic, and Neuralgic Affections."
ALFRED ASPLAND, F.R.O.S.,
Consulting Surgeon to Ashton Infirmary.

"I have used it largely in Spasmodic and Painful Affections, Brouchitis, and Neuralgia. It has the property of being readily combinable in ordinary prescriptions—an advantage over all similar preparations."

R. TRAFFORD WHITEHEAD, M.R.O.S.

A Surgeon writes:—"In Diarrhœa, Colic, Ague, Spasms, I have found it relieve more pain and cause more joy than any other article that can be named. Has proved itself a specific against sea-sickness."

Island Bridge, Dublin.

"I am pleased to say that although I have not finished a quarter of the bottle (2s. 9d.) the pain has left my chest, and the cough is almost well."—J. BROWN.

Immediately Relieves
COUGHS,
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CRAMP, AGUE,
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REVISED PRICE LIST.

	Retail.	Per doz.
	s. d.	£ s. d.
Towle's Chlorodyne	1 1½	0 8 6
Ditto	2 9	1 3 0
Ditto (3 fluid oz)	4 6	1 16 0
Ditto (8 ")	11 0	4 13 0
Liq. Chlorodyni (Original and only Genuine Preparation) ½ lb. ..		1 10 0
Ditto ditto ¼ lb. ..		2 14 0
Ditto ditto 1 lb. ..		4 16 0
Winchester Quarts (6 lb.) 7/6 per lb., bottles free.		
Towle's Antibilious Pills	1 1½	0 8 6
Ditto	2 9	1 3 0
Towle's Chlorodyne Lozenges }	0 7½	0 6 3
Ditto Jujubes }	1 1½	0 8 6
Ditto in bulk, bottles free, containing 1 lb., 2/9 each.		
Ditto ditto 1 lb. 10 oz. 4/6 ..		
Ditto ditto 4 lb., 10/- ..		
N.B.—The Commissioners will allow them to be sold by the retailers without further duty, provided they are simply wrapped in paper, and not enclosed in a box, bottle, or packet.		
Thornton's Celebrated Toilet Cream	1 0	0 9 0
Ditto	1 6	0 14 0
Ditto	2 6	1 4 0
Amboline (Registered Trade Mark)	2 6	1 4 0
The Thornton (Red) Lotion (Stamped)	2 6	1 4 0
Thornton's Paragon Hair Wash	1 0	0 9 0
Ditto	2 6	1 4 0

Posters, Bills, and Showcards on application.

£5 worth (assorted or otherwise) Carriage Paid.

7 lb. Lozenges and upwards stamped with Chemists' own name, free of charge.

A. P. TOWLE & SON

75 BACK PICCADILLY.

MANCHESTER, December, 1888.

RAIMES' COMPOUND SYRUP OF HYPOPHOSPHITES

Contains the full amount of Hypophosphites, and is Neutral.

Price 2s. per lb. In Winchester Quarts, 1s. 10d. per lb.

MISTURA BISMUTHI AROMAT. CONC.

DOSE—HALF DRACHM.—Equivalent to Liq. Bismuthi B.P., 5j; Ether. Chlor., 15 m.; Tinct. Nucis. Vom., 8 m.; Morph. Mur., gr. $\frac{1}{24}$; Acid. Hydrocyanic. Dil., 2 m. (Coloured as Tinc. Card. Co.)

Price 9s. per lb. In Winchester Quarts, 8s. 6d. per lb.

RAIMES, CLARK & CO.
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SAMPLES SENT
ON APPLICATION.

RAIMES & CO.
YORK.

LOFTHOUSE & SALTMER, MANUFACTURING CHEMISTS, WHOLESALE & EXPORT DRUG MERCHANTS HULL,

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles.
QUOTATIONS ON APPLICATION.

SOLUT. ÆTHERIS NITROSI (Æther. Hyponit.)

1 part to 5 Sp. Vini Rect. 56 o.r. makes Sp. Æth. Nit 850.

This concentrated preparation is carefully drawn in our own laboratory, is highly recommended, and is daily finding increased favour with the trade for making Sp. Nitre, as required for use, and thus avoiding the risk of a development of free acid, which is more or less prevalent in Sp. Nitre that has been drawn some time. Price in Winchester Quarts, 3s. per lb., net.

SYR. FERRI PHOSPH. CO.

This preparation is guaranteed to contain the full proportion of Phosphates as originally prescribed by Parrish, and will keep bright and without deposit. Price in Winchester Quarts, 6d. per lb. to account. Special quotations for quantities of 1 cwt. and upwards.

PUMILINE.

THE ONLY PURE ESSENCE AND
EXTRACT OF SNOW-GROWN
PUMILIO PINES.

FOR GOUT, RHEUMATISM, SORE THROAT, CHEST AFFECTIONS.

SIR MORELL MACKENZIE wrote, December 9, 1887:—"I have much pleasure in stating that I have made use of Oleum Pumilionis during the last twenty-five years, that I consider it a most valuable preparation. It acts as an admirable tonic to the mucous membrane of the air passages in cases of chronic bronchitis and laryngeal catarrh. I am glad, therefore, to hear that the remedy is about to be used on a large scale, and I have no doubt the results will be highly satisfactory.

(Signed)

"MORELL MACKENZIE, M.D."



THE SNOW-GROWN PINUS PUMILIO.

PUMILINE ALONE, with the single exception of Pinol, possesses the physical and chemical properties which give it the faculty of being administered internally with SAFETY. It is, therefore, essential for Chemists to use Pumiline, as it is the only preparation obtained from snow-grown Pumilio Pines.

FOR TRADE PRICE LISTS, PAMPHLETS, ANALYTICAL REPORTS, &c.—

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TRADE MARK.



SODEN MINERAL PASTILLES

TRADE MARK



The BEST and SAFEST REMEDY for all Affections of the THROAT, CHEST, LUNGS,
COUGHS, ASTHMA, SORE THROATS, BRONCHITIS, CATARRH, CONSUMPTION.

19 HARLEY STREET, CAVENDISH SQUARE, W.—I have watched the effects of the Soden Waters for a considerable period, and regard them as extremely valuable in obstinate Catarrhal Affections of the Throat. The small amount of iron which they contain renders them very useful in the early stages of Throat Consumption, and they do good in nearly all cases of relaxation of the mucous membrane. The Soden Mineral Pastilles offer a most convenient method of using the Waters, producing both a Local and General effect. They are especially beneficial in Catarrhal Diseases of the air passages. I frequently found them of great service in the case of Singers and Public Speakers. (Signed)

MORELL MACKENZIE, M.D., LONDON.

WHOLESALE, 10s. 6d. NETT PER DOZ.; RETAIL PRICE, 1s. 1½d. PER BOX.

CAUTION.—See that each box has Dr. W. Stoeltzing's Signature, and our Trade Mark (two Globes with Cross and Crescent), which is impressed on each Pastille; none others are genuine.

THE SODEN MINERAL PRODUCE CO., 10 DYER'S BUILDINGS, HOLBORN, LONDON, E.C.

Any Chemist applying to us will be supplied gratis with Counter Bills, size about 11 x 9, printed on one side only; also with Transparent Showcards for the window.

WITHOUT A RIVAL!

From the time Medicine was first discovered by the Ancients down to the present none ever made such progress as

BEECHAM'S PILLS.



They stand without a rival, and have by far the largest sale of any Patent Medicine in the World. This is a fact which every business man is bound to admit.

All Foreign Dealers will find BEECHAM'S PILLS the most Saleable Medicine in the Market.

The health-restoring and life-giving properties of these Pills are such as to increase their demand every year.

The words "BEECHAM'S PILLS, SAINT HELENS," are on the Government Stamp affixed to each box.

Prepared only and sold by the Proprietor, **THOMAS BEECHAM, ST. HELENS, LANCASHIRE, ENGLAND**, in boxes at 1s. 1½d. and 2s. 9d. each, with full instructions for use.

COATED SPRING BOUGIES OR ANTROPHORS.

In use by over 400 Physicians and Surgeons for gleet, fistula, wounds, &c., &c.

24% Thallin Sulphate ..	(7 in.)	2/6, 5/4, and 17/6 per box
5% " " and 10% Cocaine ..	"	2/9, 5/6, and 18/6 "
21% " " and 10% Cocaine ..	"	3/9, 7/6, and 30/ "
5% " " and 10% Cocaine ..	"	4/6, 8/6, and 33/ "
5% Iodoform ..	"	2/9, 5/6, and 18/6 "
10% " " ..	"	3/6, 7/4, and 22/ "
2% Nitrate of Silver ..	"	2/9, 5/6, and 18/6 "
5% Tannic Acid ..	"	2/9, 5/6, and 18/6 "
5% Zinc Sulphate ..	"	2/9, 5/6, and 18/6 "

Each box contains 6, 12, and 50 Bougies respectively. Export orders executed with special Bougies for hot countries.

SOLE DEPÔT:

THOMAS CHRISTY & CO., 25 Lime St., London, E.C.

DR. HENRY'S



Chlorodyne

IN GLASS STOPPERED BOTTLES ONLY.

SOLD RETAIL, 1/1½ each; WHOLESALE, 7/6 per doz.

ALSO IN BULK FOR DISPENSING PURPOSES
5/6 per lb.

THOMAS, WAKEHAM & CO.

Manufacturers,

86 to 88a Leadenhall Street, LONDON, E.C.

DR. MOORE'S COUGH BALSAM.

The absolute Cough Cure.

The Wonder of the Age.

The Taste is Delightful.

The Effect is Magical.

Will cure any Cough.

In use over 20 years.

Thousands of Testimonials.

Of all Chemists, Stores, &c., or Post free for 1s. 1½d. and 2s. 3d. of

MOORE & CO., 125 Houndsditch, LONDON.

The Mormon Elder's

DAMIANA WAFERS

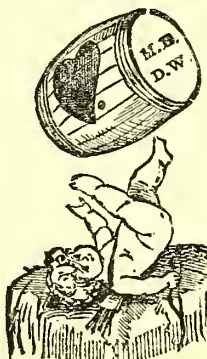
THE MOST POWERFUL
INVIGORANT
EVER PRODUCED.

Permanently restores those weakened by early indiscretions, imparts youthful vigor, restores vitality, strengthens and invigorates the BRAIN AND NERVES. A positive cure for IMPOTENCY and Nervous Debility. *Prompt, Safe, and Sure.* 4/6 per box, 6 for 22/6. Usual discount to the Trade. Send for Circular.

F. B. CROUCH,

202 Grand Street, New York City;
London Depot, 51 Strand, W.C.

Hovenden & Son, Sanger & Son,
Barclay & Sons, Edwards & Son, and
all Wholesale Druggists.



IMPORTANT.

ROYAL BALSAMIC PLAISTERS

PREPARED BY W. MATHER.

CAUTION TO THE TRADE.

The Commissioners of Inland Revenue having instituted Proceedings against several Chemists owing to certain Handbills accompanying the sale of Royal Balsamic Plaisters, such Handbills being regarded as asserting a Proprietary Right contrary to Act of Parliament, retailers are respectfully solicited to examine all packages of Plaisters they may have in stock, and

Destroy all Handbills Issued Prior to this Notice

that have reference to Royal Balsamic Plaisters. As all future Handbills will bear the date of issue at the bottom, it will be understood that all Handbills as have no date thereon must not be used. It is hoped that retailers will render assistance to prevent further proceedings by their compliance with the terms of this notice. It may be observed that the Stamp on the back of the Plaisters is in accordance with the Provisions of the Act of Parliament.

W. MATHER,**DYER STREET, HULME, MANCHESTER, ENGLAND.**

PRICE LISTS SENT ON APPLICATION.

London Wholesale and Export Agents: Messrs. MACE & HALDANE, 77 Milton Street, London, E.C.

GLASS BOTTLES

OF EVERY DESCRIPTION
IN ANY COLOUR
PLAIN OR STOPPERED

MANUFACTURED BY

E. A. HEARN & CO., 381-3 KINGSLAND ROAD, LONDON, E.
HIGHEST AWARD ADELAIDE EXHIBITION, 1887.



CHLORIDE OF LIME!
IN AIRTIGHT WATERPROOF & ODOURLESS PACKAGES
INVENTORS AND MANUFACTURERS **NATIONAL CHEMICAL CO., LONDON**
THE N. C. COS. PACKAGES HAVE STOOD THE TEST FOR MANY YEARS, AND CAN ALWAYS BE RELIED UPON TO GIVE SATISFACTION.
KEPT IN STOCK BY ALL WHOLESALE DRUGGISTS & C.
SEE THEIR PRICE LISTS.



ATKINSON'S PATENT TRUSS.

"Quite a new departure. The most ingenious and effective truss we have ever examined."—*Med. Press and Circular*.
"An important feature is the peculiar form of the face of the pad, which allows pressure to be given by a flat surface or a more or less obtuse one, at discretion. The advantages of this truss are very marked."—*British Medical Journal*.
"An important improvement. The practical surgeon will see the great advantages presented by this truss."—*The Lancet*.
"Will supersede the old-fashioned, inefficient, and uncomfortable instruments which makers still continue to supply to sufferers from hernia."—*Hospital Gazette*.

Illustrated Particulars Gratis by Post from the Patentee—
B. F. ATKINSON, 7 Mill Street, Hanover Square [late 3 Hemming's Row Charing Cross.

DISPENSING BOTTLES & PHIALS

WE BEG TO CALL ATTENTION TO OUR

"CRYSTAL BLUE TINTED,"

Being First-rate Bottles.

WE SUPPLY THEM AT THE FOLLOWING VERY LOW PRICES:

3 and 4 oz. 7/9 per gross.
6 " 8 " 8/9 "

A Sample Bottle sent free on application. All other kinds equally low.

Please address orders for the above to our City department,

3 UNION COURT, OLD BROAD STREET, CITY, LONDON, E.C.

I. ISAACS & CO.

Glass Bottle Manufacturers.

DISPENSING BOTTLES & PHIALS

The following are our greatly Reduced Prices:—

CLEAR BLUE TINTED.

3 and 4 oz. 6/6 per gross. | 12 oz. 11/6 per gross
and 6 oz. 7/6 " | 16 oz. 15/6 "

WHITE MOULDED PHIALS.

LONG OR SQUAT SERIES.

1/2 oz. 3/0 per gross. | 1 1/2 oz. 4/3 per gross
1 oz. 3/6 " | 2 oz. 4/9 "

Prompt attention to country orders. Packages 1/ each, allowed for if returned. Sample bottle sent free on application.

I. ISAACS & CO.

GLASS BOTTLE MANUFACTURERS,

25 Francis St., Tottenham Court Road, London, W.C.

Established upwards of 70 years.

Bankers, London and Westminster.

DR. RENNER'S ESTABLISHMENT FOR VACCINATION WITH CALF LYMPH,

186 (late 228) Marylebone Road, London, N.W.

VACCINATION FROM THE CALF DAILY FROM 11 TO 12 O'CLOCK

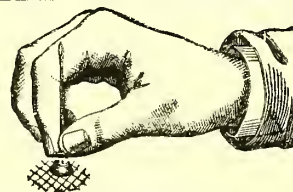
Reduced price of Calf Lymph (daily fresh).

Tubes	{	Large	...	...	2s. each, or 3 for 5s. 6d.
		Small	...	...	1s. " " 2s. 9d.
Points	{	Large	...	...	1s. " " 2s. 6d.
		Small	...	...	9d. " " 2s.
Squares	...	...	...	2s. 6d. each.	

Registered Telegraphic Address—"VACCINE LONDON."

Sent on receipt of remittance addressed to the Manager of the Establishment. Discount to the Trade.

Trade Mark.



Registered.

THE
ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH,
12 PALL MALL EAST, LONDON, S.W.
SOLE AGENTS FOR DR. WARLOMONT'S CALF VACCINE.

Tubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 5s.
HUMAN VACCINE, from healthy children only, microscopically examined and source quoted. Tubes, two-thirds full, 1s. 8d. each; Tubes one-third full and Lancet-charged Points, 1s. each; Pin-points, 1s. 3d. each. Eighteen charged Small Points, 5s. Tubes, two-thirds full (same as those mentioned above, but without source), in quantities for export, £5 per 100 Tubes. Pin-points uncharged, 1s. per dozen. Vaccine Ejectors 1s. 3d. each, including postage. Vaccinations by appointment. P.O.O.'s (including postage, and crossed London and Westminster Bank), with orders, payable to
EDWARD DARKE, Secretary.

Office hours, 10 to 4; Saturdays 10 to 2.

SPECIAL WHOLESALE LIST
OF
HOSPITAL REQUISITES
MANUFACTURED BY
THE ARGYLE RUBBER CO.
60 BUCHANAN STREET, GLASGOW.

PLEASE COMPARE THE FOLLOWING PRICES WITH THOSE YOU ARE NOW PAYING.

WATER BEDS.

Best Quality Beds, Cushions, Pillows, Bottles 5/6 per lb.
(A full size Bed—72×36—costs about £5 10s.)

SHEETING.

Single Texture Sheeting (Rubber on one side only) .. 1/6 per yard.
Double-Faced "Hospital" Sheeting (Rubber on both sides) 2/- "
Ditto, ditto, super. quality 2/6 "
Pink Jaconet 1 10 per yard (for not less than 20 yds.).

GUTTA PERCHA TISSUE.

Hospital Quality 5/ per lb.
For 50 lbs. or more 4/9 "

MARTIN'S BANDAGES (with Tapes).

2½ in. wide—5	7½	10½	15	21 feet
1/4 .. 2/-	2/8	4/-	5/8	each
3 in. wide—1/8	2/8	3/4	5/-	6/8 ..

POROUS DITTO.

2½ in. wide—5	7½	10½	15	21 feet.
2/- .. 3/-	4/-	6/4	8/4	each
3 in. wide—2/4	5/8	4/6	6/8	9/- ..

WEB ELASTIC BANDAGES.

2 in.	2½ in.	2½ in.	3 in.	3½ in.
Soft Brown 5/4 .. 6/4 .. 7/4 .. 8/4 .. 9/4	per yard			
Strong or Tourniquet	8/4 .. 9/4 .. 11/4 .. 1/2 .. 1/4	"		

SPLINTING.

Goose's Splints, all sizes	8/6	per dozen pairs
Ditto, in Sheets	9/-	per square yard
Ditto, in Pieces, 11 by 33 in.	2/-	per piece.

ENEMAS.

Ingram's Seamless Enemas, complete in boxes	32/-	per dozen
Warne's Patent, ditto	36/-	"
Best Disconnecting, ditto	35/-	"

List of Surgical Instruments, &c., on application. Samples of Sheeting, &c., on application.

Telegraphic Address:—"MAGNUS GLASGOW."

M. M. P. FRASER, Proprietor.

NOW READY.

J. SANGER & SONS'

ADDENDA TO PRICE CURRENT,

Containing all the Newest Proprietaries
and most recent prices.

SENT, POST FREE, ON RECEIPT OF
BUSINESS CARD.

J. SANGER & SONS, 489 OXFORD STREET, LONDON, W.



Inspect our well-assorted Stock of
**DRUGGISTS' SUNDRIES, PERFUMERY,
LOZENGES,
MINERAL WATERS, &c.**

PRICES COMPARE FAVOURABLY WITH OTHERS

AGENCIES OF ALL KINDS UNDERTAKEN
ON FAVOURABLE TERMS.

KEARSLEY'S Widow Welch's FEMALE PILLS.

These are universally acknowledged to be the Genuine, and Druggists may safely recommend them.

CAUTION!

The Proprietors of Kearsley's Original Widow Welch's Female Pills find it incumbent on them to caution the purchasers of these Pills against various imitations by parties who have no knowledge of their peculiar preparation, the Original Recipe having been sold to the late G. Kearsley, of Fleet Street, whose Widow found it necessary to make an affidavit, for the protection of her property, in the year 1798. The Genuine Recipe for **Widow Welch's Female Pills** has been prepared by them for **100 Years!** Chemists are particularly requested to remark that, as a testimony of authenticity, each bill of directions contains an affidavit, and bears the signature of "C. KEARSLEY," in writing, also engraved on the Government Stamp, and each box is wrapped in WHITE paper.

Price 2/6s. per Dozen, subject to usual Discount. Special Quotations to Shippers and for large quantities on application to

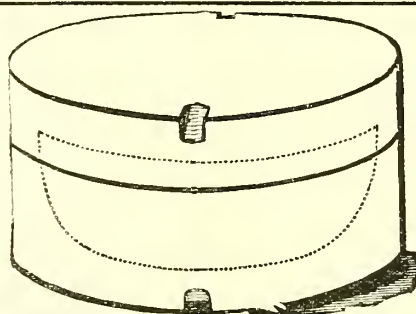
J. SANGER & SONS, 489 OXFORD STREET, LONDON, W.

WILLIAM TOOGOOD'S SPECIALITIES.

WAREHOUSE AND SHOW ROOM, BURLINGTON BUILDINGS, HEDDON STREET, REGENT STREET, LONDON, W.

TOOGOOD'S IMPROVED PATENT EARTHENWARE COVERED POTS

*Are claimed to be the most perfect
and convenient yet offered to the Trade.*



Owing to the increasing demand for our Patent Pots, we have introduced a Special THIN Series for Dispensing.

These Pots are beautifully glazed and finished, and, being very light, are specially adapted for sending by post.

ORDINARY THICKNESS—

1 dr.	2 dr.	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	3	4	6	8 ounces.
$\frac{1}{8}$	$\frac{1}{6}$	$\frac{1}{8}$	$\frac{1}{7}$	$\frac{1}{8}$	$\frac{1}{10}$	$\frac{2}{2}$	$\frac{2}{10}$	$\frac{3}{4}$	$\frac{4}{6}$	$\frac{5}{6}$ per doz.

THIN for DISPENSING—

$\frac{1}{2}$	$\frac{3}{8}$	1	$1\frac{1}{2}$	2	3	4	6	8 ounces.
$\frac{1}{7}$	$\frac{1}{8}$	$\frac{1}{10}$	$\frac{2}{-}$	$\frac{2}{4}$	$\frac{3}{-}$	$\frac{3}{8}$	$\frac{5}{-}$	$\frac{6}{-}$ per doz.

TOOGOOD'S BURNT-IN POTS, FOR COLD CREAM, TOOTH PASTE, &c.

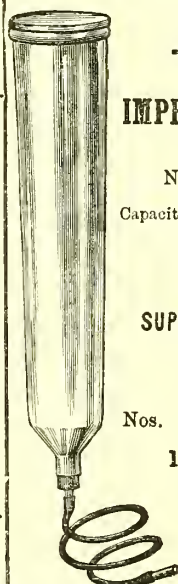
TOOGOOD'S GRADUATED MEASURES.

TOOGOOD'S BOXWOOD-TOP CORK BOTTLES

TOOGOOD'S MEXICAN SQUARES.

TOOGOOD'S CORN-SOLVENT BOTTLE.

TOOGOOD'S POISON BOTTLES.



TOOGOOD'S IMPROVED PERCOLATORS.

Nos.	1	2	3	4	5
Capacity	12	25	66	100	160 ozs.
	2/	3/	4/6	6/	7/ each

SUPPORTS FOR ABOVE IN STAINED WOOD.

Nos.	1	2	3	4	5
	$\frac{1}{9}$	$\frac{2}{-}$	3/	$\frac{3}{-}$	$\frac{3}{6}$ each.

NORMAN'S PATENT PILL COATER



The cheapest and most efficient machine yet introduced, combining simplicity with portability, and enabling small quantities of pills to be coated with the same facility as large.

It speedily saves its own cost.

Price 3/6 each.

AUSTRALIAN AGENCY AND SAMPLE ROOM:

Mr. A. I. JOSEPH, 250 Pitt Street, Sydney.

Telegraphic Address: "TOOGOOD LONDON."

Telephone No. 3834.

William Toogood's Price Current of Glass Bottles, Measures, Earthenware, Druggists' Sundries, &c., will be forwarded post free upon application.

SPECIAL ATTENTION GIVEN TO SHIPPING ORDERS.

MAW'S

EARTHENWARE INHALERS

For Hot Water, Infusions, &c.

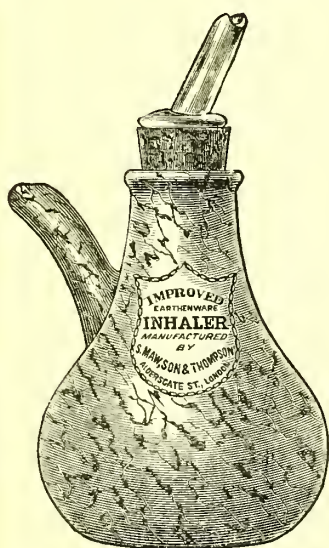


FIG. 8.

MAW'S IMPROVED.



FIG. 6.

MAW'S DOUBLE-VALVED.

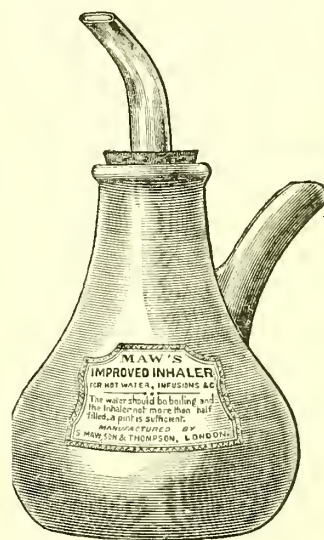


FIG. 8A.

MAW'S IMPROVED

Fig. 6.—Double-Valved, 60/- per dozen; with Elastic Tubes, 78/-

Fig. 8.—Marbled, 32/- per dozen.

Fig. 8A.—White, 21/- per dozen.

Fig. 8A.—White, half size, 13/- per dozen.

ELASTIC TUBES, with Mouthpieces, to fit Fig. 8 and 8A, 7 inches long, 8/- per dozen; 9 inches long, 12/- per dozen.

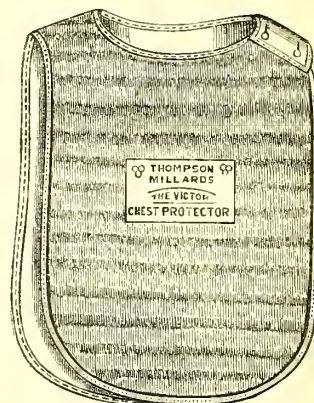
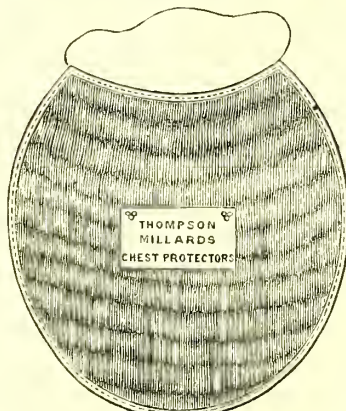
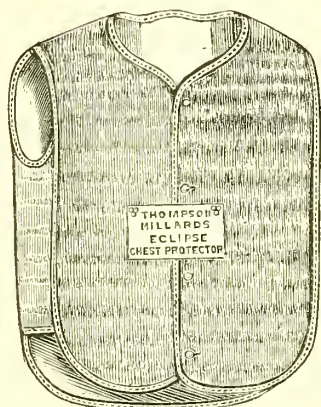
SPECIAL QUOTATIONS TO WHOLESALE BUYERS.

MANUFACTURED BY

S. MAW, SON & THOMPSON, LONDON.

CHEST PROTECTORS.

Handsome Show Cases presented with orders of Three Dozen assorted.



SCARLET or WHITE FELT.

		No. 1		2		3		4		5		6			
THE "ECLIPSE" (new vest-shaped pattern), per doz.		17/6		23/6		31/6		39/		48/		56/			
BEST.												SECOND.			
		No. 0	1	2	3	4	5	6	0	1	2	3	4	5	6
DOUBLE per doz.		14/	16/6	21/6	26/6	32/	43/	53/	11/6	14/	18/	22/	26/6	35/	44/
SINGLE.....		"	5/9	7/4	9/3	10/9	13/6	19/6	26/	5/	6/3	7/8	9/	11/6	15/ 20/

CHAMOIS and FLANNEL.

	No.0	No.1	No.2	No.3	No.4	No.5		No.1	No.2	No.3	No.4	No.5	
SINGLE, per doz.,	5/3	8/2	11/	12/10	15/3	19/	|	DOUBLE, per doz.,	19/	23/9	29/6	36/	46/

RESPIRATORS.

Mahogany Glass Show Cases presented with **First Orders** of not less than £2 assorted.

THOMPSON, MILLARD & CO.'S NON-CORRODIBLE METALLIC (OVAL) VELVET PAD—

Retail each, 1/—per dozen, 7/6	Retail each, 2/6—per dozen, 19/	Retail each, 5/—per dozen, 42/
” ” 1/6 ” ” 11/6	” ” 3/ ” ” 22/	” ” 6/ ” ” 47/
” ” 2/ ” ” 13/3	” ” 3/6 ” ” 28/	” ” 7/ ” ” 53/
Thompson, Millard & Co.'s Cork , for retailing at 1/ each	...	... per dozen, 6/
Coghill's Nickel-Plated	... ..	” ” 15/
“Perfection,” Metallic Gauze Plate, permanently medicated, Celluloid	... ..	” ” 16/

All the above Quotations are subject to 5 per cent. Discount for Monthly Account. Special Quotations for Quantity.

THOMPSON, MILLARD & CO., LTD.
CURTAIN ROAD, LONDON, E.C.

CHEST PROTECTORS

	No. 1	2	3	4	5
SINGLE, White or Scarlet	8½×9½	9¼×10½	11×12	12½×14½	13¾×15¾
Felt.....	5/	8/3	11/	16/6	17/6
Chamois Leather	6/	9/6	11/9	15/	17/6
DOUBLE (in one piece),					
White or Scarlet Felt ...	15/	21/	27/	33/	40/
Chamois and Flannel	16/6	21/6	29/	38/	34/
DOUBLE (in two pieces),					
White or Scarlet Felt ...	12/	16/	21/	27/6	37/
Chamois and Flannel	13/6	17/6	21/9	30/	39/
Hareskin.....	8×9¼, 15/;	9¼×11, 18/6;	11×12½, 20/		

BEST QUALITY FELT.

WELL MADE.

SALEABLE.

"RECORD BEATEN."

A 1s. Earthenware Inhaler produced at last.



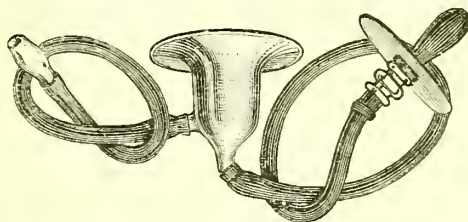
8/6 DOZEN. (CASH WITH ORDER.)

The Best small Inhaler made, the Mouthpiece being similar to a Nelson's, a large volume of steam is therefore easily passed into the air-passages and lungs.

"A simple and cheap inhaler has been one of the wants for the million, now that this method of treatment for the relief of the air-passages and for the application of medicaments has come so largely into vogue. The apparatus supplied by Messrs. Hockin, Wilson & Co., to retail at a shilling, seems to meet this requirement admirably. The vessel is of white china glazed, holding about half a pint, and fitted with a cork and a suitable glass tube. When it is desired to administer medicaments in vapour it is only necessary to place a sponge saturated with the required fluid in the tube, and to half fill the vessel with boiling-water. The passage admitting air to the inhaler is so arranged that it passes down the side of the vessel and bubbles up through the liquid, thus ensuring regularity of temperature." — *The Chemist and Druggist* March 31, 1888.

NEW DOUBLE-ACTION NIPPLE SHIELD,

As noticed in *THE CHEMIST AND DRUGGIST*, June 16, 1888.

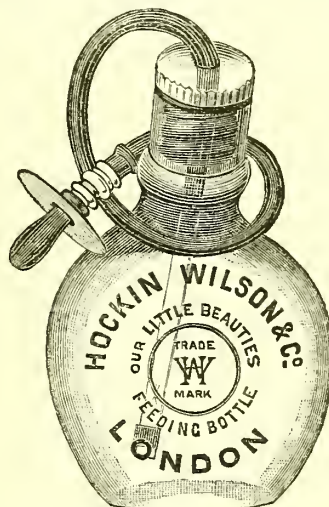


Price 6/6 dozen.

Fitted with our New Registered Mouth-piece to enable tubes to be used separately, and to prevent the child sucking air.

OUR LITTLE BEAUTIES FEEDER.

THE BEST 1/- FEEDER MADE.



Each in box, with spare tube and brushes, and equal to most 1/6 feeders. 5/6 per doz. Send for sample dozen.

HOCKIN, WILSON & CO.

13, 14, 15, & 16 New Inn Yard, 186a Tottenham Court Road, LONDON, W.

Please give Numbers when ordering, to prevent mistakes. Special Prices to Large Buyers.



R. H. BARRETT,

Flint Glass Bottle Works,

THE OVAL, CAMBRIDGE HEATH, LONDON, E.

THE HEART SCENT BOTTLE (Reg.), for Salts or Perfume.

Is most admirably adapted for pocket use, combining great beauty of design with the maximum of convenience. Prices as follows, Plain or Fluted (in 5 GROSS lots):—WHITE, 16/-; COLOURED, 18/-. If put up in Dozen Boxes, 2s. per gross extra.

N.B.—The Caps for these will be fitted, if desired, with indestructible washers, to resist the action of ammonia, which destroys cork in a short time.

METAL SCREW-CAPPED LIMES, in White Flint, Actinic Green, or Amber. The Best Bottle for Glycerine or Pills. Prices: 1 oz. 13/6, 2 oz. 15/-, 3 oz. 18/-, &c. per gross.

Chemists' and Perfumers' Bottles in great variety, Plain or Stoppered.

Orders may be sent to the PRINCIPAL WHOLESALE HOUSES.

TELEGRAPHIC ADDRESS—"FOREFRONT LONDON."

SINGLETON'S

BY FAR THE BEST
KNOWN REMEDY

FOR ALL DISORDERS OF THE
EYES AND EYELIDS.

250 YEARS'

WORLD-WIDE

GOLDEN EYE REPUTATION

OINTMENT

Recommended and frequently used by DR. WARE, DR. ALEXANDER, MR. CRITCHETT, and other Eminent Oculists

CAUTION.—None offered for Sale can be genuine unless the words SINGLETON'S GOLDEN EYE OINTMENT are engraved on the Government Stamp and round the Pot, and the Bill of Directions in which it is enclosed bears the name and address—

STEPHEN GREEN, 210 Lambeth Road, LONDON, S.E.

AUSTIN & CO.



PATENTEES & MANUFACTURERS OF ROUND CARDBOARD AND OTHER SHAPED BOXES,

BRITISH AND FOREIGN,

For POSTAL and general purposes; also PATENT BARREL PACKAGES with Metal ends, for dry goods. Inventors of the "NOVEL" METAL PERFUME SPRINKLERS, and WOOD TURNERS' MENTHOL CONE BOXES—Our Speciality.

Office & Warehouse—8 GREVILLE ST., HATTON GARDEN, LONDON, E.C.

Steam Works, 2 Printer's Buildings, Broad Yard, Turnmill St., London; and Ring Factory, Clonakilty, County Cork.

GOVERNMENT DISINFECTANT

CARBOLIC POWDER (PINK) in 1 Cwt. 2 Cwt. CASKS 1 lb & 1/2 Packages

CARBOLIC POWDER (PINK) in TINS 6d & 1/-

CARBOLIC FLUID in 6d 1/4 & 1/6 STOPPED BOTTLES

CARBOLIC SOAP No 1 & No 2

CARBOLIC & GLYCERINE SOAP in 1/4 lb & 1/2 TABS

FREE FROM POISON AGREEABLE IN SMELL. THE GOVERNMENT SANITARY CO. TO BE HAD FROM ALL WHOLESALE DRUGGISTS

LONDON E.

OKELL'S ORIGINAL MONA BOUQUET

Retail, 1/, 1/9, & 3/6; Wholesale, 7/12, & 22/6 per doz.

This much-admired Perfume (first introduced by the late Joseph Okell) may be obtained from the leading Patent Medicine Houses, Wholesale Druggists, and Druggists' Sundry Dealers.

Sole Consignee—THOMAS WEST, 59 and 61 Chester Road, Stretford, Lancashire.

Special Agents—B. G. LENNON & CO., London, and Port Elizabeth, Cape Town, and East London, South Africa.

48

BRECKNELL'S SKIN SOAP

Recommended by the late Sir Erasmus Wilson and other eminent Medical Men, and is THE BEST FOR PRODUCING A CLEAR AND HEALTHY SKIN. PRIZE MEDAL.

BRECKNELL'S SADDLE SOAP

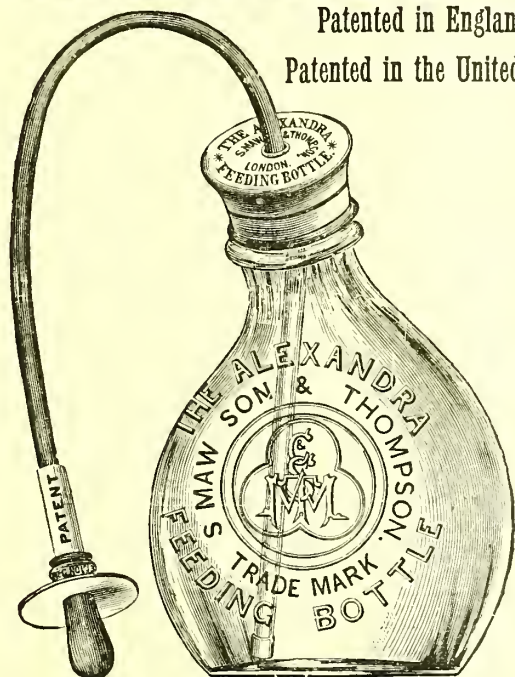
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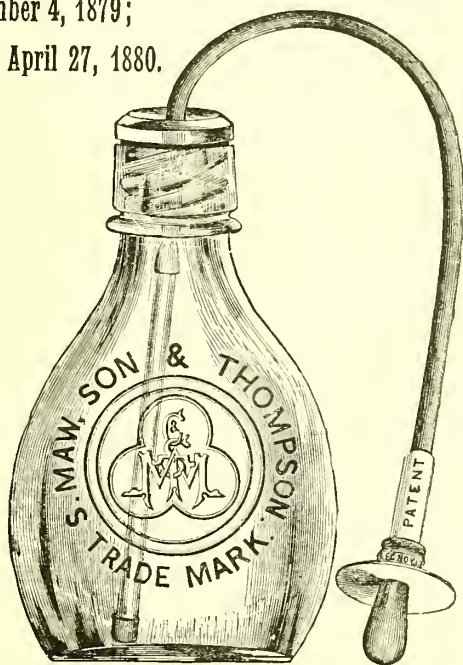
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Alexandra, Glass Screw Stoppers	4/-	8/-	11/-	4/6	8/6	12/-
Export, China or Wood Top Corks	3/6	—	—	4/-	—	—
Export, 2nd Quality, Wood Top Corks ...	2/9	—	—	3/3	—	—
Export, Earthenware Caps	—	7/3	—	—	8/-	—
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[1]

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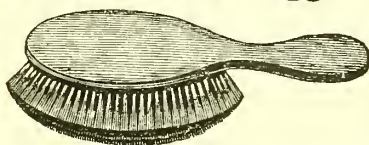
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9B 9d.	" " " " " " " " " " " "	5/	100 2d.	Polished Willow Box, 2nd quality	13/ grs. 1/5
9c 1/6	" " " " " " " " " " " "	9/6	101 3d.	Polished Acorn, 2nd quality 17/ " "	1/10
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17s 6d.	" Draughtsman shape	4/	106	Polished Willow Pedestal	21/ " 2/
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19 4d.	" Egg shape	2/6	109	" " " " " " " " " "	" very large 26/ " 2/6
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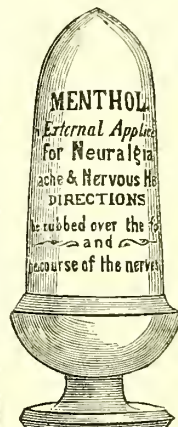
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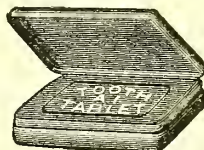
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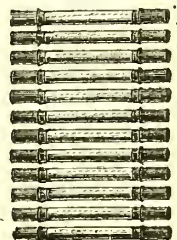
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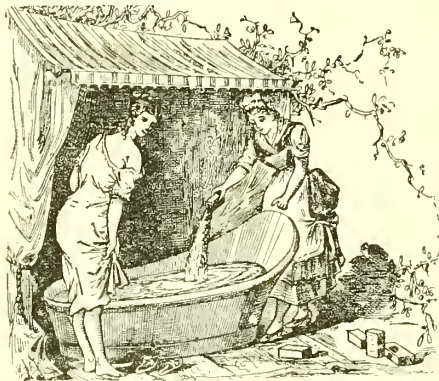
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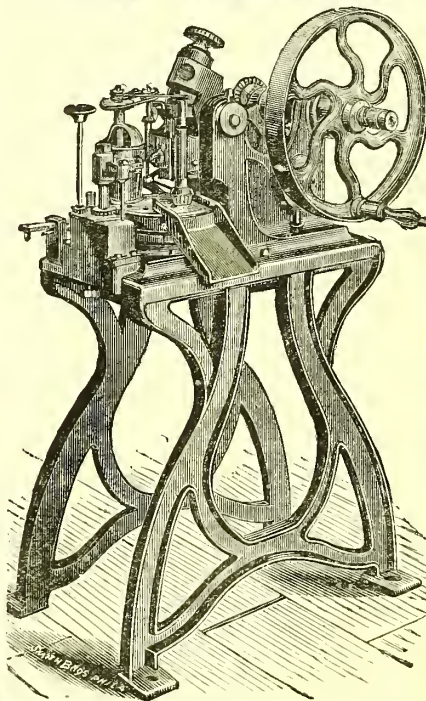
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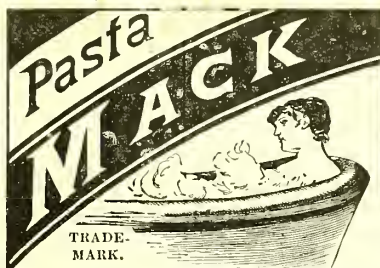
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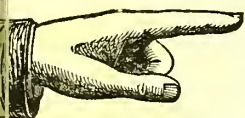
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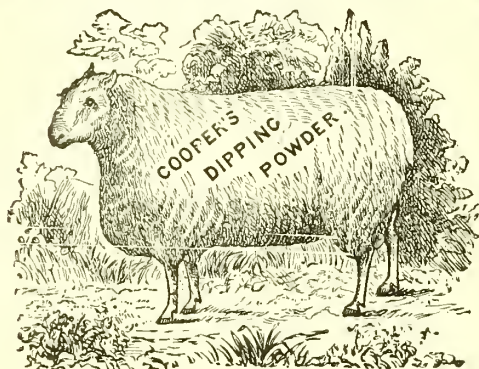
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The same price paid for barrels branded with our own brand "Lustre" as for barrels branded with American Brands.

NOTICE.—In case of Empties sent for our account to Thames Haven Wharf, or a Railway Depôt, please advise us when sending, and mark "K" on the end of the barrels in Red Paint, that we may recognise them.

DEDUCTIONS FOR DAMAGE.—Broken Chimb or Stave, 6d.; broken Head, 6d. to 1s. 6d., according to extent of damage.

COMPANIES' STEAMERS.—"ELBRUZ," 3,700 tons of Oil capacity; "KASBEK," 3,700 tons of Oil capacity; "ARARAT," 3,700 tons of Oil capacity.

THE KEROSENE CO., LIM.
26 Great St. Helen's, LONDON, E.C.
IMPORTERS OF RUSSIAN PETROLEUM.

SPECIAL NOTICE—As our Oil would be seriously damaged if put into Barrels that have contained Paraffine Oil, Paraffine empties are useless to us, and we are compelled therefore to decline to receive them.

PINE'S DEVONSHIRE OILS

PRICE

1 dozen,	13/6	Per doz. net in
3 "	12/6	Wine Bottles.
6 "	11/6	CARRIAGE PAID.
..	10/6	Single Sample
		Bottle. 1/9.

FOR HORSES, COWS, SHEEP, AND LAMBS.

THESE CATTLE OILS are prepared from the Original and Valuable Recipe of WILLIAM YOUATT PINE, and are unsurpassed, their great sale being a sufficient guarantee of their EXCELLENCE.

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Have already established themselves as the article of the future in this direction. The proprietor has succeeded in producing a paper which will keep for any length of time in any climate, and fit to be sent to any part of the world. It is as clean to handle as a sheet of note paper, and is the most effectual contrivance ever devised for ridding apartments of flies, mosquitoes, &c. They are quite ready for use, simply requiring to be opened out. In countries where the plague of flies, &c. is continuous they will be a perfect boon, and it will pay anybody to introduce them. The price charged is moderate and favours the development of a large trade.

Foreign buyers please obtain through any London house.

PATENTEE AND MANUFACTURER—

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58

GENUINE INSECT POWDER

Dalmatian, from Closed Flowers.

1s. 8d. per lb., 160s. per cwt.

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TO CHEMISTS AND DRUGGISTS.

AGENTS WANTED FOR THE SALE OF CLARK'S PATENT

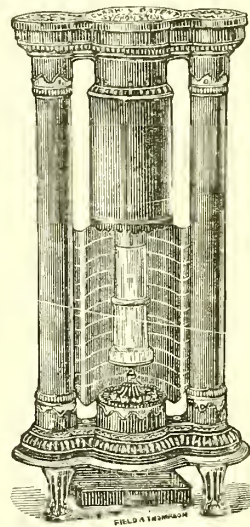
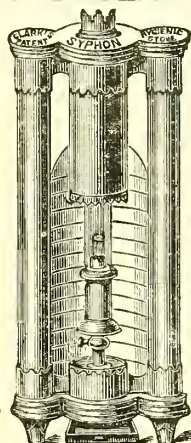
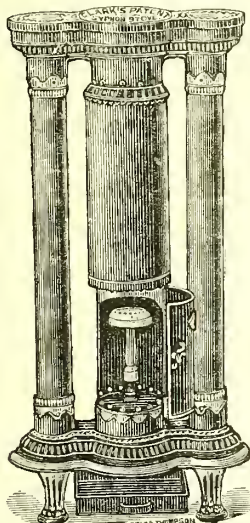
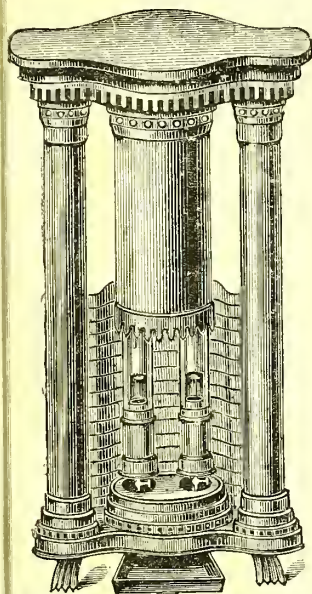
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All injurious vapours are reduced to harmless liquid inside the Stove, and passed out at foot into a tray provided for that purpose.

For Use in Hospitals, Sick Chambers, Bedrooms, Halls, Conservatories, Churches, Schools, &c.

Specially suitable for patients suffering from Bronchial affections, as a moist atmosphere is obtainable when required.

For Terms, Particulars, and Prices, apply to



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CARBOLIC POWDER, £4 TON.

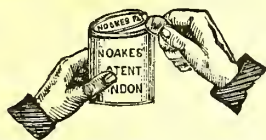
1-ton lots and upwards.

CARBOLIC PINK POWDER, 5/-, 7/6, and 10/- per cwt., in bags or casks.**HANDSOME LARGE DECORATED BLACK AND GOLD TIN BOXES,**Holding 1½ lbs. (usual 1/- size), 3/- doz. Ditto, **LARGE SIZE** (usual 1/6 size), holding about double quantity, 4/6 doz.**PALE CARBOLIC ACID**, 99 per cent. (No. 5), and **CHLORIDE OF LIME** below market prices.**CRUDE CARBOLIC ACID** (Brown), 9d., 1/-, and 1/6 Gallon; also in patent stoppered bottles, labelled, ½ pint (1/- size), 4/- dozen.**DARK SANITARY FLUID** (to be used with 80 parts of water, making a *milky fluid*), 2/- PER GAL.

10 PER CENT. DISCOUNT OFF ABOVE PRICES FOR CASH WITH ORDER.

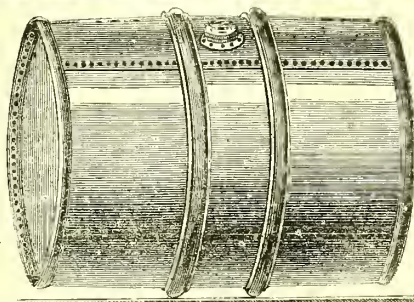
All goods delivered free in London or suburbs, or to rail or docks. **THE CHEAPEST HOUSE IN THE TRADE.****HAMILTON & CO., HIGH STREET, WANDSWORTH, LONDON, S.W.****B. NOAKES & CO.,**

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IRON BARRELS,
 CAPACITY 40 TO 120 GALLONS
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They are specially adapted for all kinds of Chemical Products, Sulphuric Acid, Glycerine, Spirits, Oils, Turpentine, Petroleum, Benzoline, Varnishes, Tar, Naphtha, Mineral Extracts, and Indammable Liquids of every description.

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Many of our customers, especially those abroad, having complained that when ARTICLES OF OUR MANUFACTURE have been ordered through Merchants and Wholesale Houses, other and inferior goods have been substituted, we beg to inform the Trade that to insure the supply of OUR MANUFACTURES in future all our BEST QUALITY GOODS will bear Trade Mark as annexed.

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ALDERSGATE STREET, LONDON.

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TO IMITATE WHICH IS FELONY.

The following SPECIALTIES are well worth the attention of the Trade:—

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| MAW'S ADHESIVE PLASTER | MAW'S CATHETERS, Silk Web, Unbreakable |
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| MAW'S BOUGIES & CATHETERS, Silk Web | MAW'S DOMESTIC MUCILAGE |
| MAW'S BREAST RELIEVERS | MAW'S EARTHENWARE INHALERS |
| MAW'S BRILLIANTINE | MAW'S ELASTIC STOCKINGS, KNEE CAPS, &c. |
| MAW'S BRONCHITIS KETTLES | MAW'S ELECTRO-MAGNETIC MACHINES |
| MAW'S BROWN WINDSOR SOAP | MAW'S ENEMA APPARATUS |
| MAW'S BRUSH AND SPONGE POWDER | MAW'S ENEMA APPARATUS (HIGGINSON'S) |
| MAW'S CACHOUS AROMATISES | MAW'S ENEMA APPARATUS (HIGGINSON'S), |
| MAW'S CAPILAVES | with Disconnecting Tubes |
| MAW'S CAPSULES | MAW'S FEEDING BOTTLES |
| MAW'S CATHETERS Silk Web, Unbreakable Eyes | MAW'S FLESH GLOVES, RUBBERS, &c. |

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MAW'S GAS STOVES	MAW'S POMADE BOTTLES
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MAW'S IMPROVED HEARING TRUMPETS, Nickel Plated	MAW'S SCALES AND WEIGHTS
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MAW'S IMPROVED SUBCUTANEOUS SYRINGES, with Huggett's Permanent Solutions	MAW'S SMELLING BOTTLES
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TAYLOR'S SUPER A1 LINT.

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Registered Trade Mark—"SANITAS,"
Telegraphic Address—"SANITAS LONDON."
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THE SANITAS CO., LIMITED,

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GOLD MEDALS:

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"Sanitas" Disinfecting Fluid	1/- Bottles and 5/- per Gallon in Jars and Casks (Extra).
"Sanitas" Disinfecting Oil	1/- and 4/- Bottles, and 15/- per Gallon in Jars and Casks (Extra).
"Sanitas" Disinfecting Emulsion	1/- Bottles, and 12/- per Gallon in Jars and Casks
"Sanitas" Crude Disinfecting Fluid	1/- " " 5/- " in Drums and Casks
"Sanitas" Insecticide and Liquid Soap	1/- " " 5/- " " " " "
"Sanitas" Sheep Dip	In Bulk only, at 5/- " " " " "
"Sanitas" Antiseptic Toilet Fluid	1/- and 2.6 Bottles.
"Sanitas" Disinfecting Powders	6d. and 1/- Tins, and in any bulk (Casks Extra).
"Sanitas" Antiseptic Tooth Powder	1/- Boxes.
"Sanitas" Antiseptic Toilet Powder	1/- Boxes.
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"Sanitas" Disinfecting Soft Soaps, No. 1 and No. 2	In Kegs only of $\frac{1}{4}$, $\frac{1}{2}$, 1 and 2 Cwts. respectively.
"Sanitas" Antiseptic Toilet Soap	1/6 Boxes of 3 Tablets.
"Sanitas" Disinfecting Family Soap	2d. Tablets, in Boxes of 3 Dozen.
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"Sanitas" Animal (Soft) Soap	1/- Pots, and in Kegs of $\frac{1}{4}$, $\frac{1}{2}$, and 1 Cwt.
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"Sanitas" Antiseptic Gauze	2½d. per Yard.
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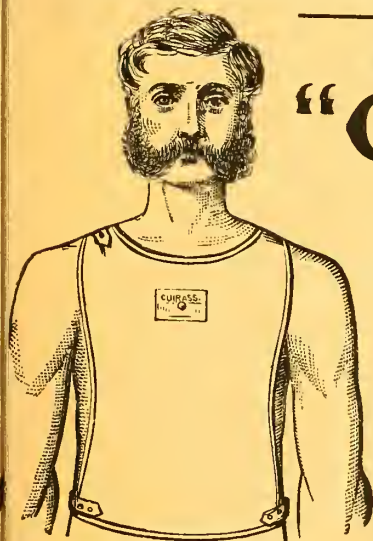


SYDNEY, 1879.

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The Felt we use is manufactured specially for us from the finest quality Lamb's Wool.

WE DON'T SEND OUT SECOND QUALITY.

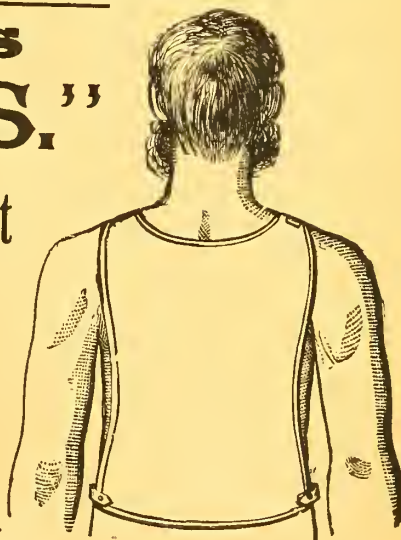


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Scarlet or White Felt

PER DOZEN.

No. 1	24/-
" 2	30/-
" 3	36/-
" 4	43/-
" 5	54/-
" 6	66/-



SCARLET or WHITE FELT, per dozen.

	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
BREADNOUGHT (Double) ...	16/6	22/-	27/-	33/-	44/-	50/-
GENTLEMEN'S Single ...	10/-	11/6	13/6	16/-	21/-	27/-
LADIES' Single ...	7/-	9/-	11/-	13/6	19/-	22/-

CHAMOIS LEATHER, lined with Flannel, per dozen.

	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
GENTLEMEN'S, Single ...	10/6	12/6	14/6	17/-	23/-	—
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FELT, Scarlet or White ...	20/-	28/6	36/-	44/-	54/6	67/-

CUIRASS JACKETS,

With half-sleeves buttoning down front, made of Perforated Chamois Leather and Porous Scarlet Flannel.

Size	No. 1	No. 2	No. 3	No. 4
Each	32 by 18 in.	34 by 18½ in.	37 by 20½ in.	39 by 21 in.
	6/6	7/6	8/6	9/6

Less 10 per cent. for Cash Monthly; 5 per cent. Half-yearly account.
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